NOTE TO USERS

This reproduction is the best copy available.

UMI

**University of Alberta**

# *Forest Co-Management in Northern Alberta: Conflict, Sustainability, and Power*

by

Leslie Caroline Treseder

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of *Master of Science*

Department of *Renewable Resources*

Edmonton, Alberta

*Fall 2000*

National Library of Canada
Acquisitions and Bibliographic Services
395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale du Canada
Acquisitions et services bibliographiques
395, rue Wellington
Ottawa ON K1A 0N4
Canada

*Your file Votre référence*

*Our file Notre référence*

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-59888-8

Canada

**University of Alberta**

## Library Release Form

**Name of Author:** *Leslie Caroline Treseder*

**Title of Thesis:** *Forest Co-Management in Northern Alberta: Conflict, Sustainability and Power*

**Degree:** *Master of Science*

**Year this Degree Granted:** *2000*

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.

Leslie Treseder

*Leslie Caroline Treseder*
*11421 89 Street, Edmonton, Alberta*
*Canada T5B 3T7*

September 28, 2000

# ABSTRACT

This study focused on structural and process variables associated with a new forest co-management process in northern Alberta, Canada. A review of existing typologies suggests that this process is a form of strategic co-management, with a relatively high level of authority transfer. Semi-structured interviews with co-management Board members and First Nation community members suggest that trust, common goals, human resources, and third-party involvement are all important factors in the process. The co-management process has potential to contribute to management of conflict over use of the boreal forest. Key challenges include definitions of sustainability and effective representation for all parties. Effective representation is particularly important for the First Nations, which are at a disadvantage in terms of accessing human resources. Suggested areas for future research include identification of interests actually represented in co-management and practical methods to reduce impacts of logging on First Nation uses of the boreal forest.

**University of Alberta**

**Faculty of Graduate Studies and Research**

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *Forest Co-Management in Northern Alberta: Conflict, Sustainability, and Power* submitted by *Leslie Caroline Treseder* in partial fulfillment of the requirements for the degree of *Master of Science.*

Dr. Robert J. Hudson, Supervisor

Dr. Naomi T. Krogman, Co-Supervisor

Dr. Clifford Hickey

Dr. James A. Beck

Date approved by Committee: September 25, 2000

# ACKNOWLEDGEMENTS

Numerous organizations and individuals assisted with the completion of this project. The Little Red River Cree Nation (LRRCN) and the Tallcree First Nation initiated this research and provided organizational and logistical assistance. The Sustainable Forest Management Network (SFMN) provided funding and other ongoing support for this project. Chief Johnsen Sewepagaham of the LRRCN and Marc Stevenson of the SFMN provided ongoing support throughout the project. LRRCN staff Jim Duke, Vern Neal, and Jim Webb helped with logistics and supporting documentation. The late Richard Dumaine provided prompt and unbureaucratic assistance and is greatly missed. The First Nation "Liaison People", Harvey Sewepagaham and Celestan Nanooch, were critical to the success of the community interviews conducted as part of this project.

I thank all the members of my supervisory committee for their input. Special thanks to my co-supervisors, Dr. Naomi Krogman and Dr. Bob Hudson, for talking me into going to graduate school. Dr. Cliff Hickey provided support throughout the project and Dr. Jim Beck made time for this project in his hectic schedule. Dr. Krogman supplied lots of encouragement and good advice whenever I asked for it (and sometimes when I didn't).

This study would not have been possible without the cooperation of the parties involved in forest co-management in northern Alberta, including the Little Red River Cree Nation, the Tallcree First Nation, the Government of Alberta, High Level Forest Products, and Footner Forest Products Limited. Study participants from took the time to share their views in an open and forthright manner. Additional thanks are due to those study participants who also provided moral support and/or access to background documents.

The field work component of this project was based out of Fort Vermilion, Alberta. Assistance with accommodation and communication was provided by Bill Daillard, Diane and Gil Dwyer, Dean and Louise Flooren, Lena Malegana and Bob Milner. The Fort Vermilion Community Library provided internet access and interesting reading materials.

I thank all my family and friends for their support, especially Sheila Treseder and Karen Virag, benefactors of the emergency student loan program. My daughter Sarah J. Frances Boyer was a wonderful field assistant and I thank her for her patience and support. Many individuals assisted with Sarah's care during the course of this project. I thank the following members of our child care "village" and apologize to those inadvertently left off this list: Amber Andersen, Emily Beidenharn, Bruce Boyer, Jenni Feldman, Louise Flooren, Lee Foote, Naomi Krogman, Don Mitchell, Tanya Nanooch, Tanja Schramm, Vicki Shirjang, Stella Spak, Gale Strome, and Jegi Varghese.

# FOREST CO-MANAGEMENT IN NORTHERN ALBERTA: CONFLICT, SUSTAINABILITY, AND POWER

## Table of Contents


*1.0 INTRODUCTION ..... 1*

1.1 Research Questions ..... 2

1.2 Potential Benefits ..... 4

1.3 Boundaries ..... 5

1.4 Epistemological Standpoint ..... 6

1.5 Organization of the Thesis ..... 8

*2.0 STUDY SETTING ..... 10*

2.1 Regional Profile ..... 13

2.1.1 The Little Red River and Tallcree First Nations ..... 16

2.2 Forest Management in the Special Management Area ..... 19

2.2.1 First Nation Forest Management Objectives ..... 24

2.2.2 Alberta's Objectives for Cooperative Forest Management with First Nations ..... 26

2.3 History of the Cooperative Management Planning Board ..... 30

2.4 Changes in the Setting During the Course of the Study ..... 32

*3.0 LITERATURE REVIEW ..... 34*

3.1 Co-management of Natural Resources ..... 34

3.1.1 Typologies of Co-Management ..... 39

3.1.2 Factors Influencing the Success of Co-Management ..... 44

3.1.3 Co-Management and Conflict Resolution ..... 47

3.2 Sustainable Forest Management ..... 51

3.2.1 Definitions of Sustainability ..... 54

3.2.2 Aboriginal Criteria for Sustainable Forest Management ..... 55

3.3 Power and Empowerment ..... 57

3.3.1 Dimensions of Power ..... 57

3.3.2 Representation within the Co-Management Process ..... 60

3.3.3 Community Empowerment ..... 64

*4.0 RESEARCH METHODS* ..... *65*

**4.1 Designing the Semi-Structured Questions** ..... **66**

**4.2 Negotiating Entry** ..... **66**

4.2.1 Liaison People ..... 68

**4.3 Sampling** ..... **69**

**4.4 Conducting Interviews** ..... **70**

4.4.1 Consent ..... 72

4.4.2 Informal Interviews ..... 73

4.4.3 Refusals ..... 73

**4.5 Triangulation** ..... **73**

4.5.1 Other Sources of Data ..... 73

4.5.2 Role of the Researcher ..... 74

**4.6 Data Analysis** ..... **75**

**4.7 Reliability and Validity Issues** ..... **78**

*5.0 FINDINGS and DISCUSSION* ..... *80*

**5.1 Benefits of Forest Co-Management in Northern Alberta** ..... **81**

**5.2 Factors Influencing Success of the Process** ..... **84**

5.2.1 Trust ..... 84

5.2.2 Common Goals ..... 85

5.2.3 Human Resources ..... 87

5.2.4 Involvement of Other Parties ..... 88

5.2.5 Equality of Partners ..... 90

**5.3 Co-Management and Conflict in the Special Management Area** ..... **92**

5.3.1 Consensus Decision-Making ..... 96

**5.4 Definitions of Sustainable Forest Management** ..... **98**

5.4.1 Sustainable Timber Supply ..... 99

5.4.2 Cultural Sustainability ..... 99

5.4.3 Integrated Resource Management ..... 101

**5.5 Representation and Empowerment** ..... **103**

5.5.1 Representation of Interests ..... 104

5.5.2 Empowerment of the First Nations within the Process ..... 105

*6.0 NURTURING FOREST CO-MANAGEMENT IN NORTHERN ALBERTA ..... 110*

6.1 Summary ..... 110

6.2 Theoretical Contributions ..... 113

6.3 Advice to the Board ..... 116

6.4 Advice to the First Nations ..... 117

6.5 Recommendations for Future Research ..... 119

*7.0 LITERATURE CITED ..... 121*

*APPENDIX A: MEMORANDUM OF UNDERSTANDING BETWEEN THE LITTLE RED RIVER CREE NATION, THE TALLCREE FIRST NATION AND THE GOVERNMENT OF ALBERTA, SEPTEMBER 1, 1999 and LETTER OF INTENT, COOPERATIVE FOREST MANAGEMENT AND WOOD SUPPLY AGREEMENTS WITH LITTLE RED RIVER CREE NATION AND TALLCREE FIRST NATION, SEPTEMBER 5, 1996 ..... 134*

*APPENDIX B: INTERVIEW GUIDES ..... 151*

*APPENDIX C: CONSENT FORM AND INFORMATION SHEET ..... 157*

## FIGURES AND TABLES

Figures:


1. Features of Qualitative Research Applicable to this Study ..... 7
2. The Special Management Area Established for Forest Co-management in Northern Alberta ..... 11
3. Treaties in Alberta ..... 38
4. IUCN model of "Collaborative management" ..... 40
5. Berkes' Levels of Co-Management ..... 41
6. A Continuum of Dispute Resolution Mechanisms ..... 50
7. Forms of Representation ..... 63
8. Coding System for Interview Data ..... 77


Tables:


1. Wood supply allocation in the Special Management Area ..... 22
2. Distributions of Annual Allowable Cuts Among Tenure Holders in the SMA ... 23
3. Features of "Comprehensive" and "Crisis" Co-management ..... 43

# 1.0 INTRODUCTION

This study of cooperative natural resource management focuses on structural and processes challenges associated with management of public forest land, where forest tenure has been allocated to private interests and Aboriginal people have special rights on the land. This research draws on examples from the co-management and common property resource management literature to identify factors affecting the success of co-management and potential barriers to its development. This study also examines opportunities for authentic cooperation between regulatory agencies and Aboriginal resource users in management of the boreal forest.

This project consisted of a sociological investigation of a new forest management institution, one of the first attempts at natural resource co-management in Alberta, Canada. The "Cooperative Management Planning Board" for the Caribou-Lower Peace region operated intermittently from 1995 to 1997 and has recently been re-established. The Cooperative Management Planning Board ("the Board") is part of a larger process of policy dialogue between the Little Red River Cree Nation (LRRCN) and Tallcree First Nation (TCFN) and the Government of Alberta and is given effect via a Memorandum of Understanding (MOU) between the First Nations and Alberta (see Appendix A).

The Board has representation from LRRCN, TCFN, the Government of Alberta, and industrial stakeholders. Its mandate is to conduct a cooperative management planning process for renewable natural resources in a specified area of northern Alberta. The management planning process is to include "renewable natural resources, .... including air, land, water, forest, fish and wildlife, parks and

natural areas, as contemplated in the concept of sustainable forest management". The process is to begin with development of a "Resource Management Philosophy and Goal Statement", to be approved by Alberta's Minister of Environment. Once the Minister's approval has been obtained, the Board will have a mandate to provide advice and recommendations to the Minister on processes, administrative relationships, and amendments to regulations, policies or laws required to implement the process (Little Red River Cree Nation et al. 1999).

Establishment of this new institutional arrangement provided a unique opportunity to document the early stages of co-management in Alberta and examine issues related to institutional development. Using a qualitative approach to sociological inquiry, this study identified opportunities and challenges associated with implementing co-management, incorporating the views of participants involved in the process. The current status of co-management in northern Alberta and the potential for the process to succeed were assessed by comparison with other co-management arrangements and with guidance from sociological theory. Advice was provided to the Board and the First Nations, intended to assist them in supporting the process to achieve its potential.

### 1.1 Research Questions

This project was initiated by the Little Red River Cree Nation and the Tallcree First Nation, who were seeking an independent assessment of whether this institutional arrangement was an appropriate vehicle to enable them to influence the management of natural resources in areas they consider traditional territories. The project was originally envisioned as an evaluation of an existing institution, with two major objectives:

1. To assess the effectiveness of the partnership between the First Nations, Government, and industrial stakeholders, according to structural, process, and content variables.
2. To determine whether the process will provide the First Nations with a means to influence management of natural resources in their traditional territories.

Negotiations between the First Nations and Government were ongoing throughout most of this project and the Board did not actually meet until very near the end of the study (see Section 2.3). Because the Board was not meeting, the study focus was shifted from the Board to the larger co-management process. Emphasis was placed on identifying factors affecting success, potential opportunities to achieve stated goals, and challenges to implementation.

The research questions used to guide the collection of data for this project were developed using variables related to the structure, process and content of the Board. The initial research questions were as follows:

Structure of the Board

- Do the Board's internal procedures meet the needs of all participants on the Board?
- Does the Board have the necessary links with other decision-making bodies to implement its goals?
- Does the Board have the financial and human resources to function effectively?

Board Process

- Do Board members maintain open communication?
- Are First Nation community members aware of the role of the Board?

- Do community members feel they have an ability to influence the agenda and decisions of the Board?
- Do First Nation participants feel that they are involved in the Board's decisions?
- Are First Nation participants satisfied with the Board's progress and decision-making processes?
- Is resolution of conflict on the Board satisfactory to all participants?

Content of the Board's Mandate

- Does the Board have the ability to address its broader priorities, including enhancing First Nations' use of the forest, improving First Nation employment in the forest industry, and ensuring a sustainable supply of timber for forestry corporations?

A detailed description of the methods used to address these research questions is provided in Section 4.

### 1.2 Potential Benefits

There are both academic and applied benefits associated with this project. This study has the potential to contribute to the academic literature by providing first-hand documentation of the initial stages of co-management in Alberta. Issues of concern to all parties involved in co-management can be identified and compared to other cases of co-management documented in the literature. This will enable confirmation of findings from the literature as well as identification of specific factors influencing the success of co-management in northern Alberta.

The applied benefits of this project include the provision of advice to participants in co-management, based on input from all of the parties involved in the process.

The results will improve participants' understandings of each other's perspectives, provide them with some context for the local application of co-management, and assist them in addressing challenges. This project will also provide the First Nations with an understanding of the ability of this process to meet their objectives and knowledge of potential barriers to effective First Nation participation.

### 1.3 Boundaries

This study focuses on the institutional meeting ground where diverse parties (First Nations, Government, Industry) are attempting to work co-operatively to implement a new approach to forest management in northern Alberta. Interview data and examples drawn from the co-management and common property resource management literature are used to identify factors affecting the success of co-management and potential barriers to its development. The capacity of the parties to contribute to co-management is assessed using structural, process, and content variables, including internal procedures, human resources, methods of communication and conflict resolution, and capacity of the process to address its overall objectives. The overall process is examined via comparison with previous co-management typologies, supplemented by sociological and forest management literature related to conflict resolution, sustainable forest management, and power/ empowerment. This study does not address the motivations of individual participants in the process, psychological aspects of small group behaviour, or the internal organizations of the parties involved in forest co-management in northern Alberta.

## 1.4 Epistemological Standpoint

"Epistemology" refers to the study of the nature and validity of knowledge (Encyclopaedia Brittanica, 1976) or "ways of knowing" and is fundamental to the conduct of scientific research. A researcher's epistemological framework influences the type of questions asked and how they are asked, the way data is analyzed and findings interpreted. The dominant epistemological tradition in natural resource management is positivism, with a set of implied, but usually unstated, normative philosophical commitments (see Patterson & Williams 1998). This research was deliberately undertaken from a non-positivistic standpoint, not so much as a challenge to the dominant paradigm, but in response to the nature of the research problem.

Co-management in northern Alberta is a poorly understood and rapidly evolving phenomenon, well-suited to investigation using qualitative methods of inquiry. "Qualitative approaches" refers to interpretive techniques for coming to terms with the meaning of phenomena, emphasizing the way in which the people being studied understand their social realities (Babbie 1999). Some features of the qualitative approach adopted for this study are summarized in Figure 1. There is much discussion in methods texts about the distinctions between qualitative and quantitative approaches to the conduct of social science research. Often these two approaches are cast as binary opposites, with some authors going as far as to state that that the two styles reflect "...different views of the epistemology of science and its ultimate goals and contribution to human thought and endeavour" (Brewer and Hunter 1989). I subscribe to the view that the two approaches are necessary components of the research process, are complementary, and can represent different ways of looking at the same problem (see Glaser & Strauss 1976, pp. 17-18). This viewpoint is hopefully consistent with my beliefs that there are different ways of knowing; that reality is a relative concept that changes across time, space, cultures, and individuals; and that knowledge is at least partially a social

construction. I concur with Agrawal (1995) that the divide between indigenous and scientific knowledge is artificial[1] and would support a similar argument about the distinctions between qualitative and quantitative approaches to social research.

**Figure 1. Features of Qualitative Research Applicable to this Study ***

- Subjects are studied "in context" with no manipulation of settings.
- Influence of the researcher is not eliminated but is understood and used productively.
- Information is conveyed in non-numerical form.
- Procedures are flexible and data are unstructured.
- Researcher attempts to understand the situation from the perspective of the participants.
- Analysis is ongoing and can occur before data collection is complete.
- Reasoning is inductive (from specific observations to a general pattern).
- Meanings depend on context and are related to the positions and perspectives of different observers.
- Analysis attempts to categorize data and make connections between categories.
- New concepts and theory can be created by blending empirical evidence and abstract concepts.

*Adapted from Bryman 1988; Maxwell 1996; Newman 1994 & 1997.

[1] Agrawal (1995) provides a critique of claims to substantive, methodological and contextual differences between western/scientific knowledge and indigenous/traditional knowledge. He suggests that attempts to distinguish between indigenous and western are "potentially ridiculous" and that productive dialogue is needed between the traditional and the scientific.

Having stated that reality is a relative concept, the interpretive orientation of this research needs further explanation. The interpretive social science paradigm includes the assumption of multiple social realities defined by individuals in a given situation (Bryman 1988). Within these multiple social realities, however, there are shared concepts that enable individuals to communicate with each other. This research assumes that the concepts being discussed (e.g. "sustainability") had similar meanings to the participants in the study and that differences in responses reflect different opinions on issues rather than different understandings of the questions being asked. This assumption is important given the cross-cultural nature of this project, where the same questions were asked of First Nation and non-native participants. A corollary assumption is that I understood the meanings of the responses of participants from all parties involved in this study. Because these assumptions are related to the validity of the research methodology, they are discussed in more detail in Section 4.7.

## 1.5 Organization of the Thesis

This thesis contains six additional sections:

- Section 2 introduces the study area and provides background information to establish a context for the conduct of forest co-management in northern Alberta.
- Section 3 provides a review of the academic literature on co-management, including existing typologies and factors influencing success. This section also includes theoretical perspectives on major themes from the interview data, including conflict, sustainability, and power/empowerment.

- Section 4 describes the methods used to gather information, analyze data, draw conclusions, and generate advice to the parties involved in co-management in northern Alberta.
- Section 5 discusses the findings of this study, drawing on interview data and theoretical guidance from the literature review.
- Section 6 includes a discussion of potential theoretical contributions of this study and a summary of advice provided to participants in the co-management process. This section also identifies further research questions arising from this study.
- Section 7 lists the literature referred to in this thesis.

The Appendices at the back of this thesis include supporting documentation relating to the forest co-management process in northern Alberta and the collection of data for the project.

## 2.0 STUDY SETTING

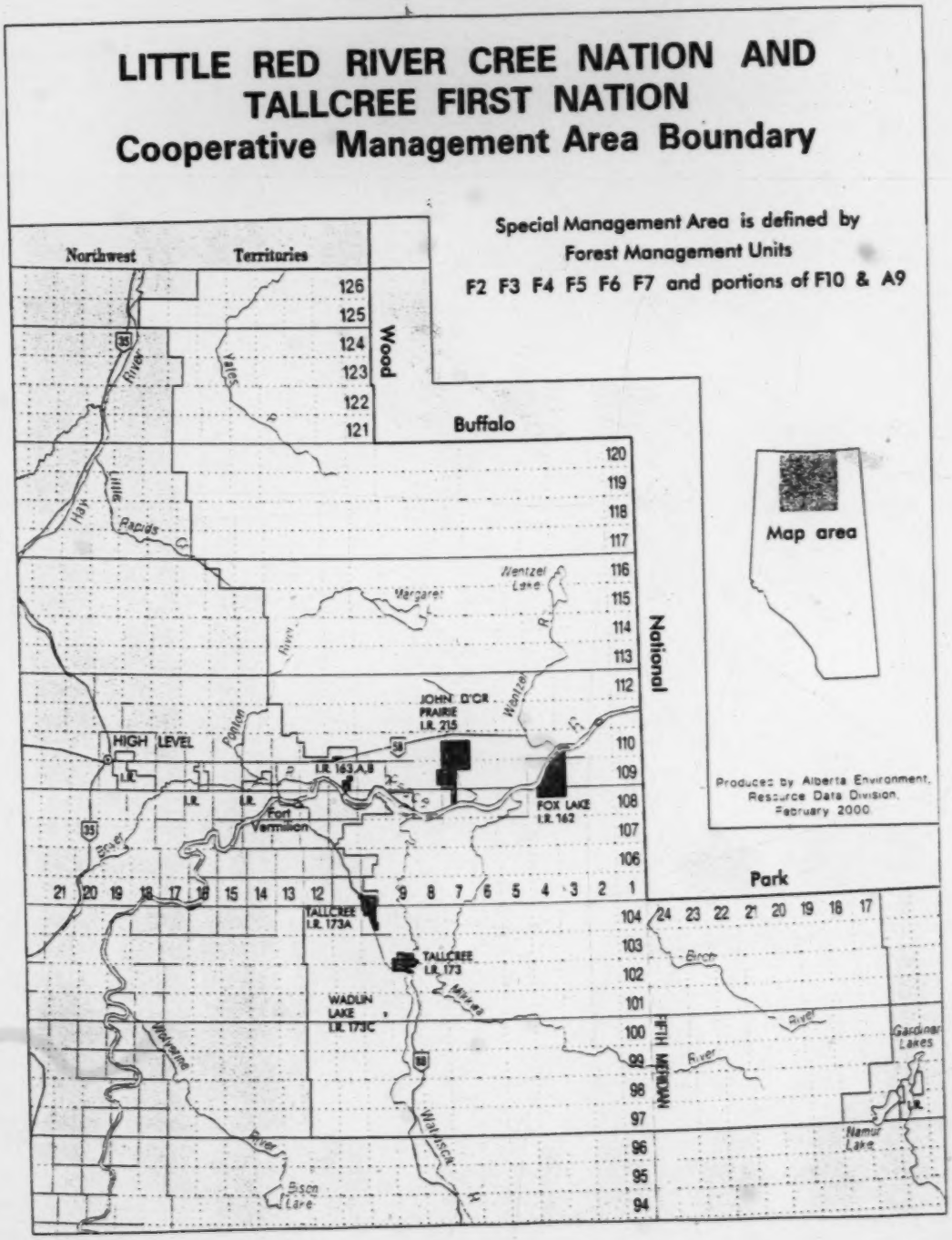
The geographical setting for this study is the area of the Board's jurisdiction, a Special Management Area (SMA) of about 30,000 $km^2$ of boreal forest, located in northern Alberta adjacent to Wood Buffalo National Park (see Figure 2). Administratively, the SMA is part of Alberta Environment's "Northwest Boreal" Region and includes Forest Management Units (FMUs) F2, F3, F4, F5, F6, F7 and parts of FMUs F10 and A9 [2].

The SMA contains a diverse landscape that includes part of four Ecoregions: Mid Boreal Mixedwood, Boreal Subarctic, High Boreal Mixedwood and Low Boreal Mixedwood (Strong & Leggat 1992). The SMA also includes the Caribou Mountains, a plateau supporting "the most diverse and extensive Boreal Subarctic/Highlands landscape in Alberta" (Caribou Mountains Special Places Local Committee 2000). The Caribou Mountains are part of a 6,384-$km^2$ (2,465-$mi^2$) site recently nominated for protection under Alberta's Special Places Program. Three areas within the SMA (totaling 36 $km^2$) are currently protected under Alberta's *Wilderness Areas, Ecological Reserves and Natural Areas Act*. These areas are Burning Sulphur Natural Area in FMU F2; Harper Creek Natural Area in FMU F4; Caribou River Natural Area in FMU F7 (LRRCN et al. 1997, p. 9).

---

[2] In April, 2000, forest management units in Alberta were re-numbered by Alberta Environment. New Forest Management Unit F23 includes old FMUs F3, F4 and F6. New Unit F24 includes old units F2, F5 and F7. The SMA therefore comprises FMUs F23 and F24, and portions of F10 and A9. Most of the wood supply allocations are based on the old FMU numbering system and this system is used on most maps of the SMA.

**Figure 2. The Special Management Area established for Forest Co-management in Northern Alberta.**


LITTLE RED RIVER CREE NATION AND
TALLCREE FIRST NATION
Cooperative Management Area Boundary
Special Management Area is defined by
Forest Management Units
F2 F3 F4 F5 F6 F7 and portions of F10 & A9
Northwest Territories
Wood Buffalo
National Park
Map area
Produced by Alberta Environment,
Resource Data Division,
February 2000
HIGH LEVEL
Fort Vermilion
JOHN D'OR PRAIRIE I.R. 215
FOX LAKE I.R. 162
I.R. 163 A,B
TALLCREE I.R. 173A
TALLCREE I.R. 173
WADLIN LAKE I.R. 173C
Bison Lake
Gardiner Lakes
Namur Lake
Wentzel Lake
Margaret L.
Peace River
Hay River
Hotchkiss River
Meikwa River
Wolverine River
Birch River
Naylor Creek
Watuscik Creek
Peace River Settlement
126 125 124 123 122 121 120 119 118 117 116 115 114 113 112 110 109 108 107 106 104 103 102 101 100 99 98 97 96 95 94
21 20 19 18 17 16 15 14 13 12 9 8 7 6 5 4 3 2 1
24 23 22 21 20 19 18 17

The SMA supports a diverse array of wildlife, including ungulates (woodland caribou, white-tailed deer, wood buffalo, moose), carnivores (wolf, black bear, lynx, fox, coyote), furbearers (wolverine, fisher, marten, weasel, squirrel), raptors, water birds, songbirds and reptiles (see LRRCN et al. 1997). Aquatic resources include the Peace River and tributaries and a number of small lakes, some of which support sport fisheries.

Five First Nation Reserves are located within the SMA (LRRCN et al. 1997):

| | |
|---|---|
| John D'Or Prairie (LRRCN) | 142 $km^2$ |
| Fox Lake (LRRCN) | 101 $km^2$ |
| North Tallcree (TCFN) | 22 $km^2$ |
| South Tallcree (TCFN) | 6 $km^2$ |
| Beaver Ranch (TCFN) | 0.84 $km^2$ |

These reserves were created pursuant to the terms of Treaty 8, signed on July 8, 1899 at Fort Vermilion (Judd 1997) and some days later at Little Red River (Mair 1999). At the time of the signing of Treaty 8, this part of Alberta was virtually unknown, "excepting to the fur-traders and a few missionaries, settlers, explorers, geologists and sportsmen" (Mair 1999, p. 22). The Cree of the area lived in isolated forest communities and continued this lifestyle until about 1957 when they began to establish reserves (LRRCN et al. 1997). The people of the Little Red River Cree Nation and the Tallcree First Nation continue to use many areas outside of their Reserve lands and many sites within the SMA have historical, cultural, and spiritual significance to them. The LRRCN community of Garden River, located inside Wood Buffalo National Park, is not currently designated as an Indian Reserve. The settlement's status is among the topics included in larger policy dialogues between the First Nations, the Government of Alberta, and the

Government of Canada, along with Treaty Land Entitlement Claims, specific claims, and other issues related to Aboriginal and Treaty rights.

## 2.1 Regional Profile

The SMA is located on the east side of the Municipal District (MD) of Mackenzie #23. The MD of Mackenzie is Alberta's largest municipal district, comprising 12 per cent of the provincial landmass or 77,494 $km^2$ (Statistics Canada 2000). The MD stretches from the B.C. border in the west and the N.W.T. border in the north, around Wood Buffalo National Park and south to the 23rd baseline. The total population of MD #23 is approximately 15,000, including nearly 5,000 people of aboriginal ancestry[3] (see Peace Country 1999; Mighty Peace Tourism Association 1999; Town of High Level 1997; LRRCN et al. 1997).

The 1996 Census of Canada indicated that the MD had a total population of 7,980, including an Aboriginal population of 720 (Statistics Canada 2000). Census data, however, does not include populations on Indian Reserves (Eva Schmidt, M.D. Of Mackenzie No. 23, personal communication). A population estimate prepared for the Little Red River Cree Nation two years after the census (KPMG 1998; see Section 2.1.1) suggested that there were over 2300 people in the three communities comprising that First Nation. The latter study used a variety of methods in an attempt to deal with known problems of underreporting associated with census data in First Nations, problems well known to those working with Aboriginal communities. Given the number of First Nations in the MD as a whole, population estimates of 5,000 Aboriginal people and a total regional population of 15,000 do not seem unreasonable.

---

[3] "People of aboriginal ancestry" within the MD of Mackenzie include members of the Little Red River Cree, Tallcree and Dene Tha' First Nations, non-status Indians and a substantial Metis population. In addition to First Nation Reserves and Metis Settlements, "significant" aboriginal

The MD of Mackenzie bills itself as "the last frontier" (Peace Country 1999) and "an outdoorsman's dream come true" (La Crete Chamber of Commerce 1999). It boasts Alberta's oldest community, Fort Vermilion, founded in 1788 as a North West Company Trading Post (Mighty Peace Tourist Association 1999; Judd 1997). Since the decline of the fur trade, the region's economy has developed around oil and gas, agriculture, and forestry (Mighty Peace Tourist Association 1999). The oil and gas industry is centred in Rainbow Lake and Zama, west of the SMA on the west side of the MD. Although this industry represents the majority of the MD's tax base and generates much of its revenue (Improvement District #23 1993), there has been a relatively low level of oil and gas activity within the SMA. This is changing, however, with the oil and gas industry recently identified as a "major player" on the landscape within the SMA (LRRCN et al. 1997, p. 10). The mineral industry is also becoming increasingly important, as numerous operators move into the SMA in search of diamonds and other mineral resources.

The amount of agricultural land in the MD of Mackenzie has tripled since 1971, largely due to the efforts of the Mennonite population at La Crete and the Ukrainian population at Rocky Lane (ID #23 1993). Most agricultural land in the MD is located outside the SMA and many farmers work in the forest industry during the winter months. There has been a close relationship between farming and forestry in this region for at least a century. The following description was written by O.C. Edwards on June 29, 1900:

> "Before leaving [Fort] Vermilion I should say that it presents in the country adjacent the most thorough of evidence of successful farming which we have seen anywhere. There is a considerable

---

populations are found in the Town of High Level and the Hamlet of Fort Vermilion (LRRCN et al. 1997, p. 17).

> half breed and white population engaged in tilling the land and every one spoken to seemed quite satisfied with their location – plenty of cattle, horses, hens and pigs - ... wheat is frozen some years but yields an abundant crop... 12 miles above the village on the river... we saw a portable sawmill. There was an additional one quite close ..." (Leonard and Whalen 1998, p. 73).

The relationship between farming and forestry in the MD of Mackenzie is characterized by some as evidence of "a unique cooperative spirit" (ID #23 1993) and by others as evidence of the marginal status of agriculture in the region (LRRCN et al. 1997, p. 21).

The forest industry has assumed increasing importance in the economy of the MD of Mackenzie. The increasing importance of the forest industry can be expected in light of the Alberta government's moves to diversify the economy through forest industry expansion (see Wellstead 1996 and Section 2.2). The High Level Forest Products (Tolko Industries Ltd.) mill in High Level employs 300 people and is described as the "mainstay of the regional forest economy" (LRRCN et al. 1997, p. 21). Two sawmills in La Crete and a number of smaller operations also contribute to the MD's production of forest products. The forest industry is expected to continue as a cornerstone of the economy in the MD as a whole and in the SMA in particular.

The MD of Mackenzie is indeed an "outdoorsman's dream come true" and has immense tourism potential, with opportunities for hunting, fishing, camping, canoeing, natural and heritage resource interpretation, and hiking (ID #23 1993). Although there are some developed recreation areas, much of the MD has limited infrastructure and the tourism potential of the area appears to remain largely untapped (personal observation; also see LRRCN et al. 1997).

### *2.1.1 The Little Red River and Tallcree First Nations*

Since the collapse of the fur trade, the First Nation communities in the SMA have not shared in the region's economic diversification. Indeed, the loss of the mainstay of their economy and the move to reserves starting in the late 1950's profoundly affected the people of the Little Red River and Tallcree First Nations and led to drastic changes in social conditions. These changes were common to Aboriginal communities across Canada and are described by Brody 1981; Hamilton 1995; Niezen 1993; Ross 1992; RCAP 1996a & c; and others. People lost their sense of independence and longstanding social and moral systems broke down. No on-reserve economy was developed and welfare dependence became a permanent feature of life (LRRCN and University of Ottawa 2000).

Current socio-economic data for the First Nations in the SMA reflect significant disparities with non-native populations. Recognizing that a comparison with regional and provincial averages is a form of imposing the norms of the dominant culture on the First Nation communities, socio-economic data from August, 1998 are presented below for the Little Red River Cree Nation [4].

The total population of the Little Red River Cree Nation in 1998 was 2,308 in three communities:

| | |
|---|---|
| John D'Or Prairie | 762 |
| Fox Lake | 1,223 |

[4] These data were collected by KPMG for the Little Red River Cree Nation, as part of preparation for the Nation's takeover of health services (KPMG 1998). These data are used with the permission of the Little Red River Cree Nation. The population of the Tallcree First Nation is much lower (estimated at 375 in three communities) but similar socio-economic conditions are thought to prevail in the Tallcree communities (North Tallcree, South Tallcree, and Beaver Ranch).

The LRRCN population is very young, with more than 50% of the population aged 19 and younger and 20% under the age of 5. The natural rate of increase from 1993 to 1995 was 45 per thousand population. This rate of increase is dramatically higher than both the provincial rate of 9.2 and the Canadian First Nations birth rate of 27.5 (KPMG 1998, p. 22). The phenomenal rate of increase of the LRRCN population is attributed to high birth rates among mothers aged less than 19; that is, more babies are being born, and to younger mothers. Based on current rates of population growth, population projections for the LRRCN communities are 3,591 in the year 2001 and 4,370 in the year 2006 (KPMG 1998, p. 20).

Welfare dependency is indeed a fact of life in the LRRCN communities, with the following percentages of the population receiving social assistance or other income support:

| | |
|---|---|
| John D'Or Prairie | 66% |
| Fox Lake | 68% |
| Garden River | 65% |

Government transfer payments make up more than 40% of income in the LRRCN communities (compared to 9% provincially) and more than half of LRRCN families have annual incomes of less than $20,000 (KPMG 1998, p. 32). Household incomes in the First Nations ranged from $19,284 to $25,505, compared to the provincial average of $47,249. Data from the 1996 census indicate that married or common-law families in the MD of Mackenzie had average incomes of $51,048 (Statistics Canada 2000), suggesting that the highest

household incomes in the First Nation communities may be less than half the regional average.

The lack of economic development on the reserves is indicated by an unemployment rate estimated at 54%, based on band office estimates of the number of unemployed adults aged 18 years and over (KPMG 1998 p. 30). Effective unemployment rates are estimated by the LRRCN to be in the order of 85% (see LRRCN 1997; LRRCN et al. 1997, p.24). Unemployment rates (1996) for the MD of Mackenzie and Alberta were 5% and 10.1%, respectively (Statistics Canada 2000). The only sources of employment identified in the 1998 socioeconomic study were the Band Council and the Federal Government, which provided a total of 152 jobs in the three communities, most of them in Fox Lake.

Low levels of education in the LRRCN communities reflect social conditions and the lack of educational options in remote communities. In 1998, 59% of the population over the age of 15 had less than a grade 9 education and 5% had no formal education (KPMG 1998, p. 34). Comparative figures (less than grade 9; people aged 25 and over) are 8.6% for Alberta and 39.9% for the MD of Mackenzie (Statistics Canada 2000).

Despite the above description suggesting a rapidly increasing population living in poverty, with few prospects for meaningful employment, the future should not be considered entirely bleak for the people of the Little Red River and Tallcree First Nations. Because the move to life on reserves has been relatively recent, the First Nations have retained a large body of traditional knowledge and still have access to much of the land they consider as traditional territory. Subsistence hunting and trapping activities are still practiced extensively, and hunting in particular continues to play an important role in the mixed economies of many households, as it does in other parts of the Canadian north (see, for example, Beckley &

Hirsch 1997; Berkes et al. 1994; Usher 1976). Subsistence activities are also critical in the perpetuation of social values and reproduction of Cree culture (see Berkes & Berkes 1999). The fact that over 90% of the LRRCN population speaks Cree at home (KPMG 1998, p. 34) is evidence of the strength and resilience of the culture.

There is some potential for economic development on the Reserves, as witnessed by the success of the Tallcree Band's new gas bar and grocery store in Fort Vermilion (personal observation) and the Little Red River Cree Nation's stated desire to develop a guiding industry based in Wood Buffalo National Park (LRRCN et al. 1997). These types of ventures will not employ large numbers of people, however, and the First Nations are clearly looking to the forestry sector to provide more economic development opportunities for their communities. It will also be important for the First Nations to maintain access to subsistence and cultural activities, which are clearly essential in maintaining social values within their communities.

## 2.2 Forest Management in the Special Management Area

The SMA is part of Alberta's "Green Area", the unsettled portion of the province consisting of forest lands not available for agricultural development other than grazing (Alberta Environment 2000). Alberta Environment has responsibility for management of public forest lands, in accordance with the *Forests Act* and associated guidelines and regulations. According to its website, Alberta Environment manages public forest lands on "a sustainable basis", defined as sustained yield timber management[5]. The forest is reportedly managed in the

[5] "Sustainable" is defined to mean "...for example, ...the amount of timber harvested annually cannot exceed the rate of annual growth less losses due to natural causes like forest fires, insects and to human activities such as oil- and gas-related operations". "Sustained yield management" is

context of "integrated resource planning", with a secure tenure system and protection of fisheries, wildlife and environmental quality (Alberta Environment 2000).

Alberta has a tenure system for disposition of timber on public lands. Three types of tenure are available:

1. A Forest Management Agreement (FMA). This is a long-term (20-year, renewable) area-based agreement for the establishment, growth and harvesting of timber. A company receiving an FMA is required to undertake forest management responsibilities and to construct major facilities to process the timber harvested. An FMA does not allocate timber volumes, this is done through the setting of the Annual Allowable Cut (AAC).
2. A Timber Quota. This is a volume-based agreement, intended to provide long-term wood supplies to smaller operators. Terms are variable (up to 20 years) and the Province retains responsibility for all aspects of forest management. The quota holder is responsible for operational planning and reforestation.
3. A Timber Permit. Local and community timber operators may be issued a permit for a portion of the AAC which is reserved for their use. Permits are issued for shorter terms (5 to 7 years) and the permit holder is responsible for reforestation costs.

It should be noted that under Alberta's tenure system, the AAC is intended as an adaptive management tool, with adjustments to AACs made as required based on new information or events such as fires. In some years actual cuts in certain areas may far exceed the AACs. This was the case in Forest Management Unit F3 in the

---

defined to mean "...coniferous, deciduous and mixedwood forests will be maintained in about the same proportion as they now exist in perpetuity" (Alberta Environment 2000).

SMA during the 1998/99 timber year. Fire salvage efforts in the area resulted in a harvest of 560,000 $m^3$ of conifer from that unit (DMI 1999b).

The major tenure holder in the SMA is Tolko Industries Ltd., which acquired an FMA when it purchased High Level Forest Products (HLFP) from Daishowa-Marubeni International (DMI) Inc. in 1999. HLFP (DMI High Level Lumber Division) received an FMA in 1996 covering about 36,000 $km^2$ (DMI 1999b). This FMA covers the western part of the SMA (specifically, FMUs F2, F5 and F7), as well as areas north and west of the SMA. The total coniferous AAC in the Tolko FMA is 603,561 $m^3$. About 21% of this AAC (124,426 $m^3$) is within the Special Management Area (see Table 1).

The Little Red River Cree Nation has held Timber Permits and Quotas in the SMA since 1996. The Nation currently has a Quota in FMUs F3, F4 and F6 and a coniferous AAC of 130,291 $m^3$ (see Table 1). The LRRCN also has a Wood Supply agreement with HLFP, obliging the Nation to supply HLFP with volumes of timber and HLFP to undertake forest management activities on behalf of the Nation. This agreement includes a reservation of timber for the First Nation and the eventual transfer of forest management responsibility to the First Nation (Askee Development Corporation and HLFP 1996). The other allocations to the First Nations identified in Table 1 have been formalized through Memorandums of Understanding (MOUs) between the First Nations and the Government of Alberta. No formal tenure had been allocated as of July 31, 2000.

**Table 1. Wood supply allocation in the Special Management Area**

| Forest Mgmt. Unit (FMU) | Tenure Holder | Type of Tenure | Type of Timber and Annual Allowable Cut (AAC) in $m^3$ |
|---|---|---|---|
| F2, F5 & F7 (F24) | Tolko Industries Ltd. | Forest Management Agreement (FMA) | Coniferous – 124,426 |
| F5 and F7 | Tallcree First Nation | Memorandum of Understanding (MOU); no formal tenure granted to date. | Deciduous – 80,000 consisting of 50,000 from pure stands in F5 plus 30,000 from mixedwood stands in F5 and F7. |
| F3, F4 & F6 (F23) | Little Red River Cree Nation (LRRCN) /Askee Development Corp. | Timber Quota | Coniferous – 130,291 |
| F3, F4 & F6 | LRRCN | MOU | Deciduous – 55,000 from mixedwood stands |
| F3 | LRRCN | MOU | Coniferous – 21,886 |
| F4 | LRRCN | MOU | Coniferous – 34,206 |
| Footner TDA (F23, F24 & F25) | Footner Forest Products Ltd. | Quota (DTA or Deciduous Timber Allocation) | Deciduous – 650,000 from F23, F24 and F25. |
| A9 | Tallcree First Nation | MOU | Coniferous – 24,700 [1]<br>Deciduous – 56,000 [1] |

Compiled from: Alberta Environment 2000; DMI 1999a, 1999b, 1999c; Government of Alberta 1997; Little Red River Cree Nation & Alberta 1995, 1996; Little Red River Cree Nation et al. 1997; Province of Alberta 1996, with assistance from Darren Tapp, Alberta Environment, July 31, 2000.

1. The AACs for FMU A9 have not been adjusted to reflect fires in 1998 and 1999. The adjusted AACs can be expected to be lower than those reported here.

The other tenure holder in the SMA is Footner Forest Products Ltd. (FFPL), a recent joint venture between Ainsworth Lumber Company Ltd. and Grant Forest Products Corp. FFPL has deciduous timber rights in the Footner Timber Development Area (TDA). The Province awarded these rights to FFPL in 1997 after considering a number of proposals (Government of Alberta 1997). The Footner TDA is 28,000 $km^2$ and includes most of the SMA (specifically FMUs F2, F3, F4, F5, F6 and F7). FFPL's tenure overlaps with Tolko's in the western parts of the SMA and with the First Nations' in the eastern parts. Footner's total deciduous AAC is 650,000 $m^3$ for the TDA. FFPL has also secured timber from other sources to support its new mill in High Level (currently under construction). Assuming that FFPL harvests two-thirds of its AAC within the SMA, the total timber allocation within the SMA is 959,842 cubic metres per year (see Table 2). The First Nations' share of this overall wood supply is 42%, comprised of 63% of the coniferous allocation and 31% of the deciduous allocation.

**Table 2. Distribution of Annual Allowable Cuts among Tenure Holders in the SMA**

| Tenure Holder | Coniferous AAC [1] | Deciduous AAC | Total |
|---|---|---|---|
| **Tolko Industries** | 124,426 | - | 124,426 |
| **FFPL** | - | 433,333 [2] | 433,333 |
| **First Nations** | 211,083 | 191,100 | 402,083 |
| **TOTAL** | 335,509 | 624,333 | **959,842** |

1. AACs are in cubic metres, as reported in Table 1.
2. FFPL's permit area includes three FMUs according to the new numbering system. Because the SMA includes two of the three FMUs, it is assumed that two-thirds of FFPL's AAC would come from the SMA.

Holders of FMAs and other timber dispositions are required to follow the Province's *Timber Harvest Planning and Operating Ground Rules* (AEP 1994)

and to develop forest management plans according to Guidelines prepared by government (Alberta Environment 1998). The *Ground Rules* include provisions for integrated resource management while the *Guidelines* refer to the need to move toward sustainable forest management (SFM). The *Guidelines* also include the following statement:

> "The FMA holder has tenure rights to harvest and reforest trees on their FMA Area. They are also responsible to mitigate impacts of their activities on other forest resources values but not for the management of these resource values. Management of other forest resources is currently the responsibility of the Crown. These resource values, however, must be considered by both the forest industry and the public" (Alberta Environment 1998, p. 4).

There are certainly indications in policy and planning documents that the Alberta government is moving toward the concept of sustainable forest management, including more consideration of non-timber forest values. The concept of sustainable forest management was an important theme in the interviews and is discussed in more detail in Section 3.2. The next two sections discuss the forest management objectives of the two parties involved in the MOU establishing forest co-management in northern Alberta, the First Nations and the Provincial Government.

### *2.2.1 First Nation Forest Management Objectives*

The Little Red River Cree Nation and the Tallcree First Nation are working together to pursue "cooperative management" as one strategy for regaining control of their traditional territory. "Cooperative management" is part of a dialogue which the First Nations initiated with "external government and industry representatives" (Webb 1999). The First Nations claim to have organized their

consultation process "within an institutional framework that would be fairer and understood by professionals embedded in the organization with which we had to interact" (Webb 1999). The First Nations' use of the term "cooperative management" is therefore likely based on the terminology used by the Government of Alberta (see Section 2.2.2). The LRRCN (1998, p. 4) defines "cooperative management" as follows:

> "An interim measure which leaves the larger Treaty/Constitutional issues undisturbed, and concentrates on use of existing consultation, planning, management and resource-tenure processes to implement pragmatic initiatives for self-reliance and self-determination" [emphasis in original].

The LRRCN's definition of "interim measure" is consistent with this term's use in land claims discourse, where it refers to measures taken by governments and Aboriginal people in "the interim", pending resolution of larger issues related to Aboriginal and Treaty rights, such as ownership of land and resources.

The LRRCN (1998, p. 1) views Treaty 8 as a "solemn commitment to share use of this territory with non-Indians" and refutes the Crown's interpretation of the Treaty as a land surrender agreement. The LRRCN states that it is undertaking cooperative management as an alternative to litigation and confrontation, in an attempt to secure a meaningful role in the management of traditional lands and resources (LRRCN 1998, p. 3). The LRRCN views forest tenures as a means of providing a stake in the cooperative management process. It expects the process to provide the Nation with a means of influence, not control, over how forest lands in the traditional territory are managed (LRRCN 1998, p. 5).

Strategically, the LRRCN views cooperative management as a government-to-government relationship intended to establish an "ecosystem management approach", including the integration of traditional ecological knowledge and science (LRRCN 1997, p.2). The sustainable development focus of cooperative management is defined by the Nation as follows:

> "Ensuring a good balance between resource use and protection is our best means of creating long term economic/ job creation, and restoring community health and stability for our people" (LRRCN 1997, p. 14).

The LRRCN views cooperative management as an opportunity for meaningful First Nation involvement and has focused recent efforts on capacity-building to support active involvement of its people (LRRCN 1998; 1997). The First Nation has identified the following issues as "continuing challenges" in the SMA: dialogue with industry about how First Nation members can access labour-intensive employment opportunities; how forestry operations can be modified to reduce their impact on wildlife populations and Indian hunting and trapping activities; and how First Nation members can be trained to participate more fully in the management of resources and receive greater benefit from resource-based economies in the region (LRRCN et al. 1997, p. 22). The ability of the co-management process to address the above challenges is likely to be an important criterion of success from the First Nations' perspective.

### 2.2.2 *Alberta's Objectives for Cooperative Forest Management with First Nations*

The Province of Alberta has entered into "cooperative management" with First Nations as part of the process of establishing government-to-government relationships between the Province and First Nation Chiefs (Alberta Aboriginal

Affairs 1996). Premier Ralph Klein made an initial commitment to this process in November, 1994 and a formal agreement ("Understanding on First Nation/Alberta Relations") was signed in November, 1995. Twenty-two of the 45 First Nations in Alberta had signed the Understanding by March 1997 (Alberta International and Intergovernmental Relations (IIR) 2000). The Government of Alberta's approach to Cooperative Management is outlined in a "Framework" document developed by Alberta Environmental Protection (AEP 1996), which defines a "cooperative management agreement" as follows:

> "... an agreement between the province and a First Nation or Aboriginal community establishing a process of consultation and cooperation on renewable resource or environmental matters of mutual interest".

The Cooperative Management Framework document also makes the following points, which are repeated in the MOU establishing the co-management process in northern Alberta:

- Existing Treaty and Aboriginal rights are recognized and respected. Cooperative management will not affect existing Treaty and Aboriginal rights or create new ones.
- Alberta's legislative and regulatory jurisdiction over natural resource and environmental matters are recognized and respected. Cooperative management will not limit Alberta's exercise of jurisdiction or detract from its proprietary rights to natural resources.
- Cooperative management is not an allocation process for renewable resources or lands, and cooperative management agreements are not intended as land management tools (AEP 1996; LRRCN et al. 1999).

Based on the contents of these documents, the Province of Alberta seems interested in developing resource management relationships with First Nations while retaining full jurisdiction and authority over natural resources. The Province's desire to avoid discussion of jurisdiction is understandable, as is its view of Treaty 8 and other Treaties as land surrender documents. Any other position could potentially undermine the Province's authority to allocate and manage resources, and collect resource revenues on behalf of the people of Alberta.

The MOU establishing the process under study is the third cooperative management agreement between Alberta and First Nations [6], and by far the most ambitious. This is the first agreement in Alberta that includes a designated area of land (the Special Management Area) and an institution to implement the agreement (the Board) (see Honda-McNeil 2000). A recent thesis on Cooperative Management, written by a government employee involved in implementing cooperative management, offers unique insights into the Provincial Government's objectives for cooperative management. The following quotes (from Honda-McNeil 2000) identify more specific objectives of the Alberta Government and of government staff involved in developing and implementing cooperative management agreements with First Nations:

> "Possibly the most significant issue motivating the province to consider partnership arrangements with First Nations deals with the need to create an environment of certainty within which industry can operate. Economic development is one of the cornerstones of the Alberta government – to promote the province as a good place to do business (the "Alberta Advantage"). Having

[6] The first two agreements were with the Whitefish Lake First Nation (December 12, 1994) and the Horse Lake First Nation (June 23, 1997).

> a First Nations population known for civil disobedience (e.g., blockades, public mischief) or legal action (court injunctions, lawsuits) is contrary to that objective. There is also an increasing body of legal decisions dealing with First Nations' access to renewable resources and consultation with First Nations, particularly in cases where Aboriginal or treaty rights may be infringed. These two issues serve as the primary motivators for the province to re-examine its existing relationship with First Nations" (p. 4).

> "The government of Alberta has two primary motives for entering into cooperative management agreement with First Nations: one, they establish a vehicle for consultation, and two, they create a forum for building partnerships between First Nations and industry, thus facilitating economic development and creating community capacity" (p. 60).

> "According to provincial officials, [these] ... agreements provide a vehicle ... to ... improve relations ... [and] ... are effective in preventing or solving problems before they become major issues" (p. 60).

The ability of the co-management process in northern Alberta to address the objectives identified above is likely to determine success of the process from the Government of Alberta's perspective.

## 2.3 History of the Cooperative Management Planning Board

The Board that is the focus of this study represents the second attempt to establish a co-management institution in northern Alberta. A previous incarnation of the Board operated from 1995 to 1997. The previous Board was established via an MOU between the First Nations and Alberta, signed on May 26, 1995 (LRRCN et al. 1995). It had a total of 9 voting members: 3 from LRRCN, 2 from TCFN, 3 from Alberta and 1 from the MD of Mackenzie. Industry stakeholders were invited to participate as non-voting members. The previous Board's mandate was to prepare a "forest management plan" for review by the Government of Alberta and the First Nations (LRRCN et al. 1995). No further advisory duties were outlined in the original MOU. Participation by "special interest groups" and opportunities for public consultation were at the discretion of the Board (LRRCN et al. 1995).

Based on a review of Minutes of meetings of the previous Board, there appear to have been seven Board meetings between July, 1995 and November, 1997 [7]. In addition, there were seven meetings of the Technical Planning Committee (established to support the Board) between February, 1996 and November, 1997 [8]. Attendance at meetings of the previous Board / Technical Committee was very consistent by First Nation and Industry members. The Alberta Government sent many different members to Board meetings. Much of the business of the previous Board and Technical Committee centred on definitions, clarification of the role and responsibility of the Board, and industry's role on the Board. There was a

---

[7] Minutes of previous Board and Technical Committee meetings were obtained from study participants. The previous Board did not have a permanent secretary and record-keeping did not appear to be a high priority. For example, there are two different versions of Minutes for a Technical Planning Committee meeting held on November 12, 1997.

great deal of confusion over the terminology "forest management plan" and distinctions between the plan to be prepared by the Board and plans that industry is required to prepare pursuant to the *Forests Act*. Industry members voiced opposition to a process that was outside of their mandate, while government members expressed concerns both about the Board's mandate and potential conflicts for government Board members who were responsible for approving what the Board produced (Forest Management Planning Board Meeting Minutes November 28-29, 1995 and January 8, 1997; Technical Planning Committee Meeting Minutes October 14, 1997 and November 12, 1997). Concerns about the Board's mandate and potential conflicts for government Board members were confirmed by the interview data collected during this study. Honda-McNeil (2000, p. 76) described the previous Board as "dysfunctional" and identified "misinterpretation of forest management plan" as the "death knell" of the previous Board.

The First Nation members on the previous Board consistently advocated an integrated approach to management of all natural resources (not just trees/timber), a position which caused concern among other Board members who did not have a mandate for management of other (non-timber) resources. The First Nation Board members were also opposed to the content of a revised MOU that was being negotiated with the Government of Alberta (MOU Planning Board Meeting Minutes March 18, 1997). Interview data from this study confirm that disagreement over the Board's mandate (i.e., timber versus natural resources) was a major reason for the breakdown of the previous Board from the First Nations' perspective.

---

[8] The Technical Planning Committee consisted of representatives of the First Nations and Industry (specifically, High Level Forest Products). There were no government representatives on the Technical Planning Committee.

Many of the concerns arising during the previous incarnation of the Board appear to have been resolved during negotiation of the new MOU, dated September 1, 1999[9]. The new Board has a mandate for "renewable natural resources" and an expanded advisory role (LRRCN et al 1999; also see Section 1.0). The term "Forest Management Plan" has been defined to have the same meaning as under the *Forest Act* and the *Timber Management Regulations*, and the Board is now charged with development of a "cooperative renewable natural resource management plan". In addition to clarification of the Board's mandate, the new MOU alters the structure of the Board. There are more seats and the forest industry is included among voting members on the Board. The Board currently has a total of 14 voting members: 3 from LRRCN, 2 from TCFN, 1 from each of the First Nation Economic Development Corporations, 3 from the Government of Alberta, 1 from the Municipal District of Mackenzie, 1 from each of High Level Forest Products (Tolko Industries Ltd.) and Footner Forest Products Ltd., and 1 from the Canadian Association of Petroleum Producers. The Government of Alberta has expanded its membership on the Board to include the Departments of Resource Development and International and Intergovernmental Relations as well as Environment. In addition to expanded membership, processes to interact with stakeholders and establish mechanisms for public review are mandatory under the new MOU.

### 2.4 Changes in the Setting During the Course of the Study

There were also many changes to the setting during the course of the study, making the conduct of the research somewhat like trying to hit a moving target. Some of the changes that occurred during the course of this project are summarized below.

---

[9] Although the MOU establishing the current Board is dated September 1, 1999, it had not been signed by October 26, 1999, which was the date of the last interview conducted for this study.

- Elections in the First Nation communities. The LRRCN's Chief was re-elected in 1999, but some of the members of Council were replaced. The Tallcree First Nation elected a new Chief in 1999.
- A re-organization of the Government of Alberta. During 1998 and 1999, the Government of Alberta underwent a series of reorganizations. The name of the Department of Environmental Protection was changed to "Alberta Environment" and Intergovernmental and Aboriginal Affairs became "International and Intergovernmental Relations". New departments were created and the mandates of existing departments were altered. A new department of "Resource Development" was created, with a mandate that included allocation of timber resources. Thus Alberta Environment no longer had the dual mandate of allocating forest resources and regulating their use.
- Negotiations and lobbying related to allocation of the timber supply in the Special Management Area were ongoing throughout most of this study. Allocations to the First Nations were part of this process. Most of these allocations have not yet been formalized through a quota or other tenure arrangement (see Section 2.2)
- Negotiations leading to the 1999 MOU were ongoing throughout most of the study and the negotiation process appeared to cause conflicts between some government departments. For example, one potential participant who declined to be interviewed stated that he did not want to participate because his department had only been offered observer status on the Board.

Despite these changes in context, I was able to proceed with interviews and obtain input from Board members and support staff from all parties to the Board (see Sections 4 and 5).

# 3.0 LITERATURE REVIEW

There are many schools of thought and advice that can be drawn upon in the study of co-management and it is unrealistic to attempt to review all of them. This literature review focuses on typologies and objectives of co-management, and issues of concern to participants in the northern Alberta process, including conflict, sustainability, and power. This section includes literature used to develop the interview questions asked of study participants. The content of the literature review is based upon a desire to provide practical advice to the participants in co-management and this study, and on principles of qualitative research. Using the literature to develop the methodology, drawing conclusions, and then returning to the literature for theoretical advice is part of the inductive process of qualitative inquiry.

## 3.1 Co-management of Natural Resources

The process of "cooperative management" in northern Alberta can be considered to be a variant of "co-management", a term that refers to a wide variety of arrangements for shared management of natural resources. Co-management to date has eluded definition and is also known by numerous other names, including cooperative management, collaborative management, joint management, participatory management, and multi-stakeholder management (Berkes 1997). Co-management is a world-wide phenomenon in natural resource management, linked to the paradigm of sustainable development. Co-management can have wide-ranging objectives, including: improving local/ community participation in natural resource management; recognizing alternative resource uses and management systems; maintaining local cultural, social and economic systems; and addressing social and economic inequities, including access to resources and distribution of costs and benefits associated with resource development

(Benedickson 1992; Berkes 1989; Berkes et al 1991; Borrini-Feyerabend 2000; Clark 1994; McCay and Acheson 1987; MacLeod 1989; M. Taylor 1998; Usher 1991; Witty 1994).

Much of the early literature on co-management in Canada was glowingly optimistic, with little critical evaluation (see Treseder & Honda-McNeil 1999). More recent criticisms of co-management include identification of its potential for co-optation of Aboriginal participants (Chambers 2000; Gibson et al. 1998; Stevenson 1996). Co-management can also be seen as a form of "incremental" institutional reform, which does not challenge the dominant paradigm of industrial forestry (M'Gonigle 1997; Chambers 2000). As there remains no widely accepted definition for "co-management", this study uses a modified version of a definition by Beckley & Korber (1996, p. 1):

> "the presence of two [or more] parties that have different interests in and/or values for the resource in question".

This definition seems appropriate in this case because it is based on Canadian forest co-management experience and the process under study involves an increasing number of parties with different objectives.

In Canada, co-management often involves Aboriginal people, to a greater extent than in most other places. Canadian co-management is therefore intimately linked with issues related to Aboriginal rights and, sometimes, Aboriginal self-government (Berkes et al. 1991; Jaggi 1997; MacLeod 1989; NAFA 1995b; Notzke 1995; Treseder & Honda-McNeil 1999; Witty 1994).

The term "Aboriginal rights" as used here refers to long-standing claims to land and natural resources, made necessary by the settlement of Canada by Europeans.

European governments, and then the Canadian government, made Treaties with Indian Nations in many parts of Canada. These Treaties typically included land reserved for the Indians (hence "Indian Reserves") and assurances that Indians could continue their usual lifestyles[10]. The Indian lifestyle in northern Alberta at the end of the 19th Century is described by Charles Mair (1999, p. 23) as follows:

> "... he had been content with his lot in these remote wildernesses, and well might he be! One of the vast river systems of the Continent, perhaps the greatest of them all, ... teeming with fish, and alive with fur and antler, was his home—a region which furnished him in abundance with the means of life .... His wants were simple, his life healthy, though full of toil, his appetite great—an appetite which...gave rise to fabulous feats of eating...".

The first Canadian treaty (Treaty No. 1) was made at Stone Fort, Manitoba in 1871 (Mair 1999, p. 21) and the last numbered Treaty (Treaty No. 11) was signed at Norman Wells, NWT in 1921. Treaty No. 8, which covers northern Alberta and parts of the N.W.T., Saskatchewan, and British Columbia, was signed in northern Alberta in June and July, 1899 (see Mair 1999). European governments have always recognized an Aboriginal interest in the land, and Treaty-making in Canada often preceded large influxes of white settlers into native territory. Events surrounding the signing of Treaty 8 are described as follows in a first-hand account written by Charles Mair:

> "... the gold-seekers, ... plunged into the wilderness of Athabasca without hesitation, and without as much as "by your leave" to the native. Some of these marauders, ... exhibited on the way a

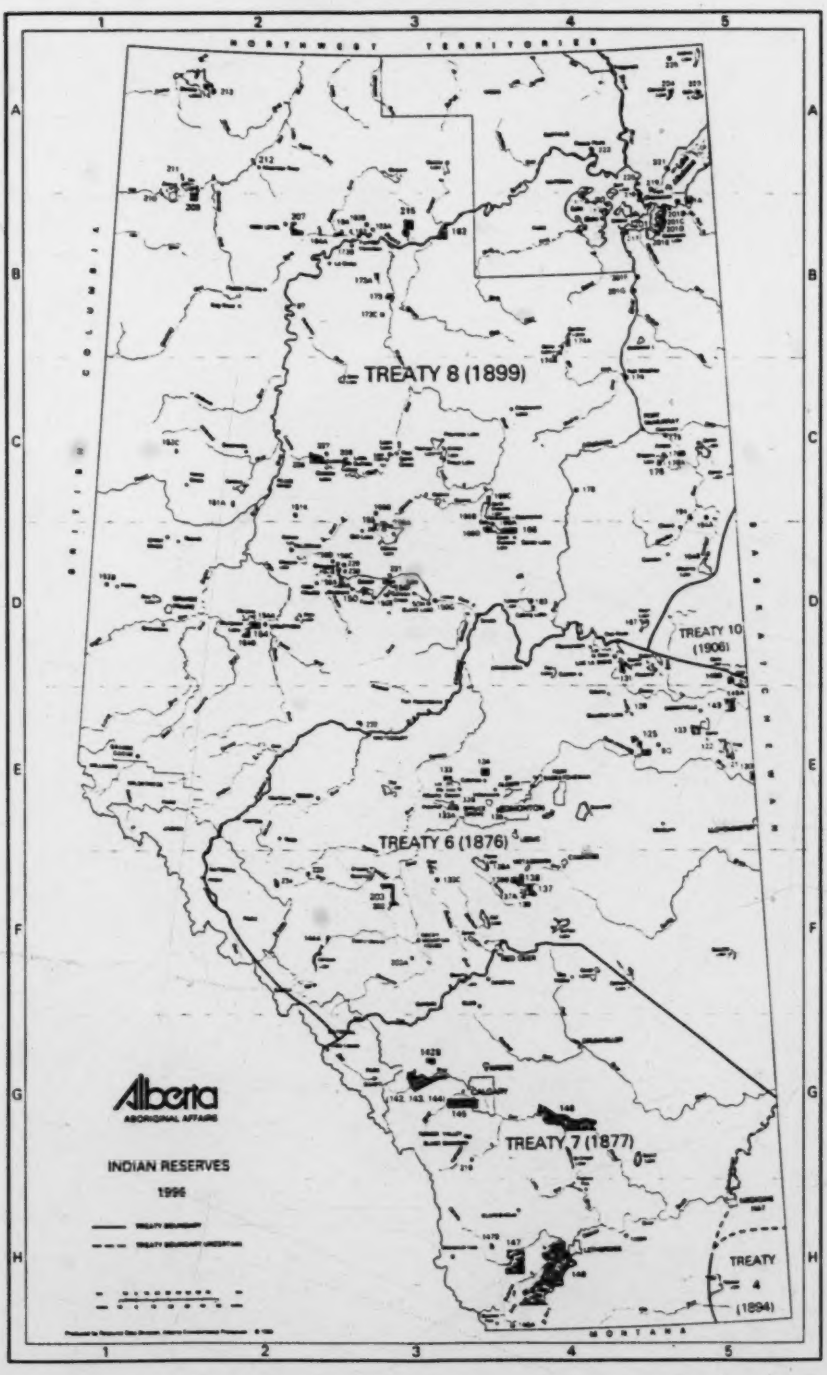
---

[10] For more information on Treaties, see Hamilton, 1995; Indian Claims Commission 1975; RCAP 1996; Treseder & Honda-McNeil 1999.

> congenital contempt for the Indian's rights. ...An outcry arose, ... which inevitably would have led to reprisals and bloodshed had not the Government stepped in and forestalled further trouble by a prompt recognition of the native's title. ...the inroad of gold-seekers ... was viewed with great mistrust by the Indians, ... as a matter of fact, those now peaceable tribes, soured by lawless aggression, and sheltered by their vast forests, might easily have taken an Indian revenge, and hampered ... the safe settlement of the country for years to come" (Mair 1999, pp. 23-24).

Treaties with Aboriginal people were negotiated prior to extensive European settlement in many parts of Canada, including all of Alberta (see Figure 3). Areas not covered by the Treaty-making process included almost all of the far north and most of British Columbia. Government recognition of Aboriginal interest in the land in these areas was reflected in Canada's land claims policy (1973), under which the Government of Canada offered to negotiate compensation for Native peoples in return for their traditional interests in lands (see Hamilton 1995). This policy has led to the settlement of comprehensive claims in the northern territories and the Nisga'a Claim in British Columbia, and to the establishment of Nunavut as a new Territory. Comprehensive claims were also instrumental the development of a distinct form of Canadian co-management (see Section 3.1.1).

**Figure 3. Treaties in Alberta**

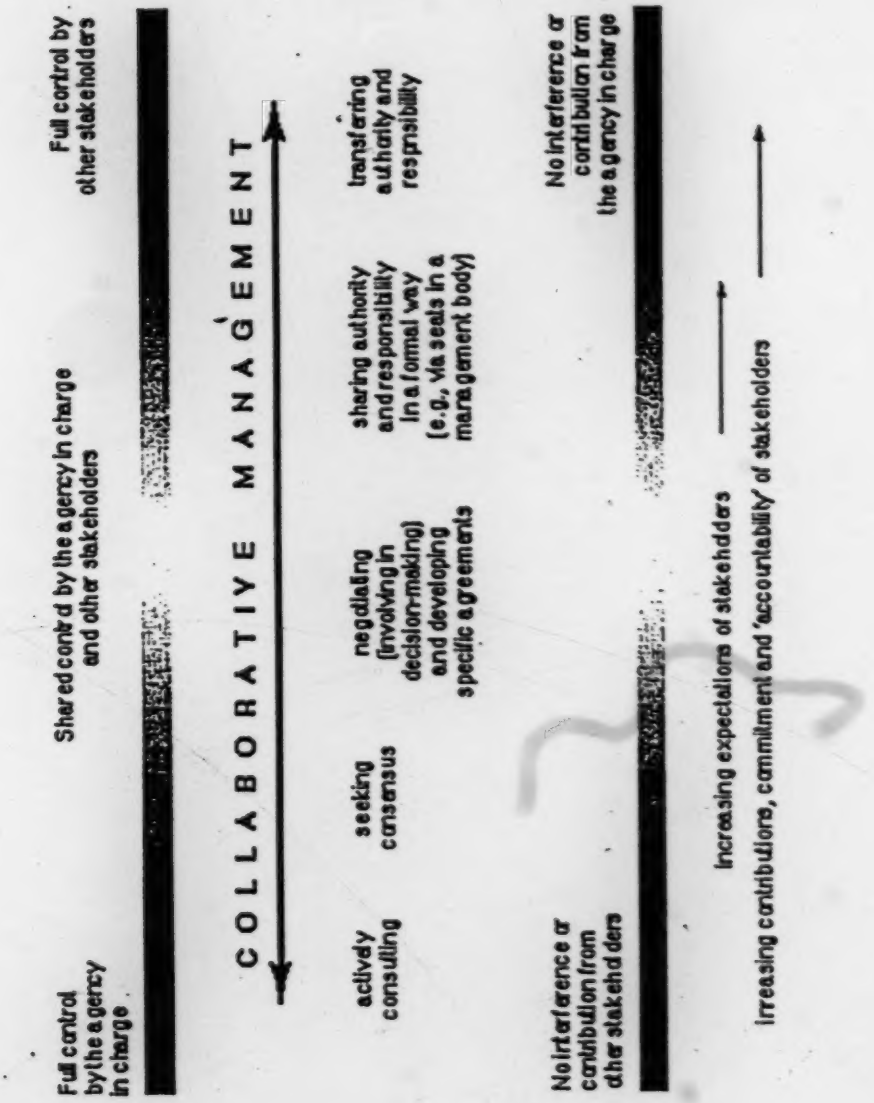


In the Provinces covered by historic Treaties, Aboriginal interests in land and resources are based on interpretations of those Treaties. Aboriginal rights associated with Treaty 8, for example, include the right to hunt, trap, and fish for subsistence purposes at all times of the year on unoccupied Crown land (see Makowecki 1993). The Federal and Provincial Governments take the position that Treaties are land surrender documents, transferring land ownership to the Crown (see Hamilton 1995 for more details as well as a different perspective). Aboriginal people, including members of the Little Red River and Tallcree First Nations, take the position that Treaties were agreements to share the land and that Indians retain an interest in the areas they agreed to share with the Crown (see Section 2.2.1; also see Hamilton 1995; RCAP 1996a & b). Interpretation of historic Treaties has often been delegated to the Courts, which have made many decisions in favour of Aboriginal people over the last 20 or so years (see Elias 1989; House 1998; E. Taylor 1998; Treseder & Honda-McNeil 1999). Aboriginal rights issues, while not "officially" part of the discourse in the forest co-management process in northern Alberta, are a prominent underlying motivating factor for the Little Red River and Tallcree First Nations and the Province of Alberta.

### *3.1.1 Typologies of Co-Management*

Lack of an agreed-upon definition for co-management has not impeded development of different typologies or models for describing it. At the international level, Borrini-Feyerabend (2000) developed a model of "collaborative management" for the IUCN Social Policy Group. This model (shown in Figure 4) ranges along a continuum from Full Agency Control to Full Stakeholder Control. Negotiation of the MOU establishing forest co-management in northern Alberta is in the middle of the collaborative management spectrum, while implementation of the MOU could move the process toward the right.

**Figure 4. IUCN model of "Collaborative management"**


Full control by the agency in charge
Shared control by the agency in charge and other stakeholders
Full control by other stakeholders
COLLABORATIVE MANAGEMENT
actively consulting
seeking consensus
negotiating (involving in decision-making) and developing specific agreements
sharing authority and responsibility in a formal way (e.g., via seats in a management body)
transferring authority and responsibility
No interference or contribution from other stakeholders
No interference or contribution from the agency in charge
Increasing expectations of stakeholders
Increasing contributions, commitment and 'accountability' of stakeholders

Source: Borrini-Feyerabend 2000, p. 12.

A model of co-management in Canada was developed by Berkes (1994, p. 18), to illustrate some possibilities of co-management along a "continuum of power and responsibility sharing". Berkes' model (shown in Figure 5) includes seven levels, ranging from "Informing" to "Partnership/Community Control". The cooperative management process in northern Alberta started at level 2 in 1994, and the previous Board operated at about level 4. There was little joint action associated with the previous Board and it did not move to a higher level in Berkes' continuum. The Board process, as outlined in the current MOU, would operate at level 5 and has the potential to reach higher levels in Berkes' model. Currently, the process is operating on a number of levels simultaneously (e.g., communities are participating in research (level 3) and in detailed forest management planning with industry (level 6).

**Figure 5. Berkes' Levels of Co-management**

| Level of Authority Transfer | | Description |
|---|---|---|
| 7 | Partnership and Community Control | Partnership of equals; joint decision-making institutionalized; power delegated to community where feasible. |
| 6 | Management Boards | Community is given opportunity to participate in developing and implementing management plans. |
| 5 | Advisory Committees | Partnership in decision-making starts; joint action on common objectives. |
| 4 | Communication | Start of two-way information exchange; local concerns begin to enter management plans. |
| 3 | Cooperation | Community starts to have input into management, e.g., use of local knowledge, research assistants. |
| 2 | Consultation | Start of face-to-face contact; community input heard but not necessarily heeded. |
| 1 | Informing | Community is informed about decisions already made. |

* Source: Berkes, 1994, p. 19.

The models of co-management discussed here focus on the degree of authority transfer from agencies to communities. Borrini-Feyerabend's model suggests that a full transfer of authority and responsibility is one end of the collaborative management spectrum (Fig. 4), while Berkes' highest level is "partnership of equals" (Fig. 5). While true partnership is a desirable goal for co-management, an equal sharing of power and responsibilities is often not the case in practice (Chambers 1999, p. 26). There has been some criticism of the reliance on authority transfer as the major criterion for evaluating co-management (Chambers 1999; Honda-McNeil 2000). Notzke (1995) points out that all co-management arrangements in Canada "fail the ultimate test" because governments retain final decision-making authority. This statement appears to be true if the "ultimate test" of co-management is a transfer of authority, and lends support to the search for other evaluative criteria.

Beckley and Korber (1996) suggest that equitable distribution of decision-making power is not necessary to achieve some of the goals of co-management. Chambers (1999) developed a detailed framework for evaluation of co-management, including institutional and operational criteria. Another way of describing co-management is by looking at the ways in which it originated. Most co-management arrangements in Canada originated either through the settlement of comprehensive claims or in response to a real or perceived crisis in resource management (see Treseder & Honda-McNeil 1999). Some features of these two "types" of co-management ("comprehensive" and "crisis") are summarized in Table 3. Another type of co-management was identified by Notzke (1995), when she used the term "strategic co-management" to describe the application of co-management by Aboriginal groups as a way to gain influence over the management of resources and by Provincial Governments as an expression of a "rethinking of rights and relationships". Honda-McNeil (2000, p. 9) suggests that co-management "to meet provincial consultation requirements with First Nations"

is another "type" of co-management, but this can be seen as part of a larger category of agreements initiated by Governments to avoid confrontation and/or litigation. These types of agreements could also be classified as "strategic" according to Notzke's description. Notzke's definition applies to the co-management process in northern Alberta and it seems appropriate to label that process as "strategic co-management" with features of both the "comprehensive" and "crisis" types identified in Table 3.

**Table 3. Features of "Comprehensive" and "Crisis" Co-management in Canada**

| Feature | Comprehensive Co-Management | Crisis co-management |
|---|---|---|
| Resources managed (scope) | Usually numerous (e.g., wildlife, forests, fish); "ecosystem approach" may be applied. | Tends to focus on one resource or one species/ population. |
| Area managed | Usually large (tens or hundreds of thousands of square kilometres). | Varies, usually smaller. |
| Land Ownership | Aboriginal lands and adjacent Crown lands where claimants have specified rights to natural resources. | Usually Crown lands; some Treaty rights may apply; co-management agreement may specify access to resources. |
| Parties involved | Federal and Provincial and/or Territorial Governments and Aboriginal claimants only; may be provisions for third party involvement. | A wider variety of stakeholders involved; provincial government involvement may be indirect; some agreements do not involve Aboriginal people. |
| Decision-making authority | Usually advisory to government Minister; institutions have legislated access to shared decision-making. | Institutions may be advisory to government, but have no legislated access to shared decision-making. |
| Public Participation | May not be mandatory or even mentioned. | Often mandatory. |

Forest co-management in northern Alberta can also be compared with approaches being taken by other First Nations in Canada. These approaches can be characterized according to a typology developed by Beckley (1998). This typology includes the forest management paradigms of "industrial forestry", "forest co-management" and "community forests". The northern Alberta process is closest to Beckley's category of forest co-management, but also includes elements of industrial forestry. The northern Alberta process is one of a handful of examples of forest co-management in Canada (see Beckley 1998; Treseder & Krogman 1999).

### *3.1.2 Factors Influencing the Success of Co-Management*

In spite of the wide variation in the forms of co-management practiced in Canada and throughout the world, a number of common factors are thought to influence the success of co-management. For example, at the international level, resource tenure rights for stakeholders are seen as critical to building local support for co-management (see Arnold 1998; Borrini-Feyerabend 2000). In the Canadian provincial context, the support of the Provincial government is seen as critical to the development of co-management (Beckley & Korber 1996; Witty 1994). Both of these factors are present in the forest co-management process in northern Alberta. Other factors expected to influence the success of this co-management process are described below.

**Communication**: Establishing and maintaining open communication is important to the success of co-management (Beckley & Korber 1996). The process brings together different parties with different views and expectations and communication is essential to the parties understanding each others' perspectives (Gibson et al. 1998; Treseder & Krogman 1999).

**Trust**: Trust is an "absolute prerequisite" for the success of co-management (Beckley & Korber 1996; also see Swerdfager 1992; Usher 1993). Trust-building among the parties involved in co-management is complicated by cross-cultural factors (Gibson et al. 1998) and historical relations between the parties.

**Common Goals**: There is some discussion of the need for common goals in the co-management literature and clearly they are important in the success of co-management institutions. Theories of small group behaviour developed by Shaw (1981) suggest that explicit goals are essential to the effectiveness of a group. Willingness to work together has been identified as an important factor in co-management (Berkes 1994). Several authors have commented on the importance of issue-based coalitions in the practice of co-management. Witty (1994) identifies the need for strategies supported by a coalition of interests. Pinkerton (1992) describes the importance of coalitions and alliances for Indian tribes in overcoming barriers and achieving more than they would have accomplished on their own.

**Human resources**: Co-management requires huge investments of time and other human resources (Borrini-Feyerabend 2000; Beckley & Korber 1996). Adequate staff support is key to the success of co-management, as is support from sources external to the process, such as non-government organizations and universities (Pinkerton 1989; Witty 1994). Implementation of co-management requires an "energy centre", a dedicated person or group applying consistent pressure to advance the process (Borrini-Feyerabend 2000; Pinkerton 1989; also see Honda-McNeil 2000). Implementation of co-management requires connections and access to resources, including "professionals with uncommon skills" (Borrini-Feyerabend 2000). Co-management participants need some degree of personal commitment to the process, because consistency of representation is essential to advance the process (Gibson et al. 1998). In addition to support staff, participants

in co-management need to provide funding to establish and maintain the process. A willingness by communities / resource users to commit funding to the process is seen as one factor contributing to the success of co-management (Pinkerton 1989; Witty 1994).

**Third party involvement:** First Nations need to work with other parties to realize the potential benefits of co-management (Witty 1994), while at the same time ensuring that the process protects their interests (Notzke 1995). All parties involved in co-management must be able to work with others involved in the process, as well as with a broad range of other interests. Third party involvement in co-management is essential to the achievement of regional goals and the inclusion of dissenting voices (Gibson et al. 1998; Witty 1994). The need for co-management to include public participation is an issue that is receiving more attention in the co-management literature (see Benedickson 1992; Treseder & Honda-McNeil 1999; Treseder & Krogman 1999).

**Equality of partners**: Equality of partnerships is the ultimate level of co-management according to Berkes (1994) and an important factor in co-management with First Nations (Treseder & Krogman 1999). Aboriginal communities cannot compete financially and technically with large forest companies and may lack forestry skills and expertise (Jaggi 1997). First Nation members with administrative and technical skills are relatively rare and often overloaded with responsibilities (Gibson et al. 1998). First Nations need to develop capacity to participate as more equal partners in the process of co-management. Equal participation in the process is one aspect of the concept of power and is discussed in more detail in Sections 3.3.1 and 3.3.2.

### *3.1.3 Co-Management and Conflict Resolution*

Co-management may develop in response to a crisis[11] and conflict resolution is an important aspect of some co-management arrangements (Honda-McNeil 2000; Notkze 1993; Pinkerton 1989). Beckley and Korber (1996) describe the social protest arising from conflict over forest management in northern Saskatchewan and the decline of this protest as co-management efforts began to move forward. These authors also point out the potential for co-management arrangements to institutionalize conflict, but fail to define what they mean by "conflict". This is a common occurrence in the co-management literature.

In this study "conflict" is broadly defined as a "divergence of goals, methods, or behaviour" (Darling 1998, p. 13; Folberg & Taylor 1984, p. 24). This definition of conflict includes both latent conflict (conflict that is not expressed or necessarily observable) and manifest conflict (conflict that is expressed or becomes a dispute). Although conflict tends to have negative connotations in our society, it is necessary in order to achieve personal, social, or institutional change (LeBaron-Duryea 1992, p. 5). Folberg and Taylor (1984, p. 19) identify other "important and positive" functions of conflict, including: setting group boundaries by strengthening group cohesion; reducing incipient tension by making issues manifest; clarifying objectives; and helping to establish group norms.

---

[11] Pinkerton (1989) suggests that co-management is most likely to develop out of a real or imagined crisis in stock depletion, and that crises of consent [over management of resources] are the usual catalysts for co-management.

Co-management institutionalizes conflict by bringing together divergent parties and forcing them to interact with each other. Co-management can therefore be seen as a form of conflict *management* rather than conflict *resolution*, as explained below:

> "*Conflict resolution* creates a state of uniformity or convergence of purpose or means; *conflict management* ... realigns the divergence enough to render the opposing forces less diametrically opposite or damaging to each other. Conflict management does not demand an identical aim, method or process, as does conflict resolution, but simply one that is sufficiently aligned to allow unobstructed progress for the separate entities" (Folberg & Taylor 1984, p. 25); (emphasis in original).

Co-management with Aboriginal people is a form of cross-cultural conflict management, providing a forum for conflict to be manifested in a potentially productive manner.

LeBaron-Duryea (1992, p. 19) discusses cultural aspects of dispute resolution, including the norms associated with collectivist and individualist traditions. "American values" reflected in mainstream mediation processes include creativity, change, immediacy, and individual freedom. "Aboriginal values" concerning conflict include harmony, equality, relativity of time, and consensus decision-making (LeBaron-Duryea 19992, p. 36). This author suggests that mainstream models of dispute resolution, even those considered "alternative" (e.g., mediation) may be inappropriate or ineffective in cross-cultural contexts. She also points out (p. 28) that while disputes need to be resolved in culturally

appropriate ways, this approach can perpetuate traditional (often male-dominated) decision-making structures that some view as undemocratic.

Various types of alternative dispute resolution (ADR) mechanisms are identified in the literature. These include: negotiation, conciliation, mediation, arbitration, and adjudication (LeBaron-Duryea 1992). Christian et al. (1989, pp. 16-17) point out that mediation should not be considered an "alternative", since it is a central process in all civil societies. These authors suggest that litigation is the alternative form of dispute resolution. Mediation is the most common strategy employed in community-based ADR (LeBaron-Duryea 1992). Mediation can also be described as an "interest-based" type of dispute resolution, according to a continuum of dispute resolution strategies based on power, rights, or interests (Darling 1998; see Figure 6).

The practice of co-management as a form of conflict management incorporates aspects of mediation, conciliation and negotiation as described in Figure 6. The flexibility of co-management and its emphasis on consensus-building make it suitable for adaptation to cross-cultural situations:

> "Models centred on consensus-building that are more flexible ... will be more appropriate ... than mediation as we know it" (LeBaron-Duryea 1992, p. 13).

While the consensual approaches to decision-making advocated by proponents of co-management seem to hold promise for management of cross-cultural conflict, it should be noted that consensual decision-making approaches face significant barriers from existing institutions, rules, and regulations (Beckley & Korber 1996, p. 15).

**Figure 6. A Continuum of Dispute Resolution Strategies**

| | |
|---|---|
| **POWER-BASED STRATEGIES** | |
| VIOLENCE (FIGHT) | ▪ unilateral attempt to control by disputants<br>▪ imposed action over another; no third party<br>▪ degree of finality; seldom ends conflict, might end dispute |
| NON-VIOLENT DIRECT ACTION | ▪ unilateral attempt to exercise control |
| LEGISLATION | ▪ legislation enacted to end conflict is unilateral<br>▪ may exacerbate instead of finalize |
| **RIGHTS-BASED STRATEGIES** | |
| LITIGATION | ▪ bilateral but little control asserted by disputants<br>▪ third party imposed outcomes; an impartial third party decision-maker intervenes; no choice<br>▪ prescribed framework; parties agree to rules |
| ARBITRATION | ▪ contractually based; third party decision maker<br>▪ less formal |
| **INTEREST-BASED STRATEGIES** | |
| MEDIATION | ▪ third party assisted negotiation<br>▪ voluntary; control in the hands of the disputants<br>▪ third party has no decision-making power; role is to manage process<br>▪ negotiation-based outcome; goal is to reach agreement |
| CONCILIATION | ▪ assisted negotiation, often without the parties together<br>▪ more focus on relationship between the parties, less on substance |
| NEGOTIATION | ▪ control in hands of disputants<br>▪ no imposed outcome; opportunity for joint gain<br>▪ no third party; decision-making vested in the parties<br>▪ parties can craft own process |
| INFORMAL PROBLEM-SOLVING | ▪ informal, no structure |
| AVOIDANCE (flight) | ▪ disputants do not engage<br>▪ may be appropriate in some circumstances |
| Source: Darling 1998, p. 18. | |

### 3.2 Sustainable Forest Management

Over the last decade, a new paradigm has emerged in forest management, to replace "sustained yield" as the guiding principle for the practice of forestry in Canada. The concept of "sustained yield" is linked to a desire for sustained benefits from the forest and has historically been linked with timber production (see Boyce 1982)[12]. The concept of sustained yield is embedded in forest management and practice, as evidenced by the following statement from the Forest Management Agreement between Alberta's Minister of Environment and High Level Forest Products Ltd.:

> "WHEREAS the Minister, recognizing the Company's needs for a forest management agreement to warrant the continued operation of its facilities, desires to provide for a perpetual sustained yield of timber for such operations ... " (Province of Alberta 1996).

One of the assumptions of sustained yield forest management is that if stands suitable for fibre production are sustained, then non-timber forest resources will also be sustained (Luckert 1997). For some years, there was tinkering with the concept of sustained yield in response to social pressure for multiple benefits from the forest. This resulted in shifting of forest management goals from "regulating age classes for timber alone" to "regulating age classes for the sustained yield of jointly produced benefits" (Boyce 1982). The sustained yield paradigm still underlies some forest management discourse, and is in some cases maintained through government policy and regulation (see, for example, Section 2.2.2).

---

[12] "Sustained yield" has also been closely linked to the sociological concept of community stability (see, for example, Lee et al. 1990; Wear and Hyde 1992), through the translation of timber harvesting into social benefits in the form of jobs. As the "sustained yield" focus of forest management has been challenged, so has the "community stability" focus of forest sociology. Sociological researchers now use concepts such as capacity and resiliency when studying social issues in forest-dependent communities (see, for example, Beckley & Korber 1995; Nadeau et al. 1999).

Although old paradigms do not die easily, changes in the context for forest management in Canada have meant that tinkering with the "sustained yield" approach was not enough to respond to society's dissatisfaction with "management of non-timber resources as a side-effect of timber production" (Luckert 1997, p. 211). Gilmore (1997) discusses the evolution of "social resource management" as a greater number of individuals and organizations seek and obtain a stronger voice in resource management decisions. This social resource management, which Gilmore terms "ecosystem management", has led to more substantive changes in forest management paradigms. Beckley & Korber (1995) describe the "new forest management paradigm" as focusing on ecosystem health, diverse human uses of forests, and long-term sustainability.

The "new forest management paradigm" is still known by an abundance of different names, including the "natural forest landscape (NFL) approach " (Booth et al. 1993) and numerous variations on "ecosystem management", the latter incorporating concepts such as natural disturbance, ecosystem health, and biodiversity (Grumbine 1994; USDA 1998). One of the more common names for the new paradigm is "sustainable forest management", a term in popular use in government policy. "Sustainable forest management" is the stated goal of the Alberta Forest Legacy (Alberta Environmental Protection 1998) and the Canada Forest Accord (Canadian Forest Service 1998a). The latter document offers the following definition of sustainable forests (obviously meant to be completely inclusive):

> "Our goal is to maintain and enhance the long-term health of our forest ecosystems, for the benefit of all living things both nationally and globally, while providing environmental, economic,

> social and cultural opportunities for the benefit of present and future generations." (CFS 1998a, p. 3).

The term "sustainable forest management" (SFM) is also used extensively in the forestry literature, where it has been identified as "the goal of most foresters and of the informed public" (Wood 1996). Without offering a concrete definition, this author notes that definitions of SFM usually include "the health of the forest ecosystem, the importance of biodiversity, and the provision of environmental, economic, social and cultural benefits to present and future generations" (Wood, 1996, p. 600).

The emerging SFM paradigm is also linked to the concept of integrated resource management (IRM). Carrow (1994) points out that there are many regulatory and institutional barriers to conducting IRM and suggests that the concept has great potential to achieve "all three components of sustainable forestry — economic sustainability, environmental sustainability and social sustainability" (p. 21). Thompson & Welsh (1993) make numerous suggestions for conducting IRM in the boreal forest, including more holistic forest plans, longer planning horizons, and clear efforts to manage for more than one resource. These authors also suggest that research questions need to be re-phrased, to "ask how we can maintain forest ecosystems while using the forest rather than focusing on accelerated fiber production" (Thompson & Welsh 1993, p. 37). While the new paradigm of SFM has yet to be clearly defined, its implications are far-reaching, potentially affecting not only the way forests are studied, but the ways that society organizes itself to manage resources. Some of the larger structural issues associated with the SFM paradigm are evident in the following statement, taken from Alberta's *Forest Management Planning Manual* (Alberta Environment 1998, p. 4):

> "Current sustained yield timber management planning is required under existing legislation but planning should move toward sustainable forest management (SFM). The government recognizes the variability in production capacity and forest management staffing levels within the forest industry and that this may have an impact on the ability of any given Company to satisfy the requirement for SFM".

### *3.2.1 Definitions of Sustainability*

Like "co-management", the term "sustainable forest management" has to date eluded definition. Carpenter and Kessler (1999, p. 812) point out that variability is a fundamental idea in the concept of SFM and that "ecosystems — including the human component — are exceedingly complex and variable". Thus no two definitions of SFM can be expected to be exactly alike. Despite this complexity, and widespread criticism of SFM by policy makers and foresters, Carpenter & Kessler (1999, p. 812) report that SFM "represents a true "paradigm shift" from "traditional sustained-yield forestry". They also identify six basic principles of the concept of SFM, about which there "is consensus". Because these principles could apply to forest co-management in northern Alberta, they are summarized below.

**Ecosystem Integrity:** SFM includes a diverse array of ecological services, environmental health objectives, and social and economic values. SFM strives to maintain ecosystem integrity, including native biological diversity and ecological patterns and processes underlying diversity and long-term productivity.

**Disturbance Ecology:** SFM recognizes forests as dynamic systems shaped and sustained by patterns of natural disturbance. It assumes that biodiversity

conservation and other objectives can be best achieved by mimicking natural disturbance regimes.

**Hierarchical Scales:** SFM recognizes the need for consideration of patterns and relationships at multiple spatial scales, and of linkages between scales. SFM includes very long time horizons and consideration of long-term and cumulative effects of management.

**Uncertainty:** SFM addresses uncertainty through the principles of precaution (conservative management in the face of poor information or uncertain events) and adaptive management (accommodating change by learning from the outcome of management interventions).

**Social Issues, Including Equity:** SFM recognizes the inter-dependence of people and ecosystems and rejects the treatment of humans as "externalities" in forest planning and management. SFM includes inter-generational sustainability, an obligation to manage forests today in a manner that does not compromise the needs and options of future generations.

**Public Participation and Accountability:** SFM recognizes the need for meaningful participation by all people who have an interest in, or stand to be affected by, the outcomes of management. SFM must be "transparent" and benefits from an informed and involved public (summarized from Carpenter and Kessler 1999, pp. 812-813).

### *3.2.2 Aboriginal Criteria for Sustainable Forest Management*

The new SFM paradigm has not ignored Aboriginal issues. Aboriginal issues and concerns are included in some of the principles outlined above and are specifically addressed in Canada's National Forest Strategy (Strategic Direction

7; CFS 1998b). Aboriginal issues are also addressed in the *Criteria and Indicators for Sustainable Forest Management in Canada*, prepared by the Canadian Council of Forest Ministers (CCFM 1996). In a discussion of criteria and indicators for SFM from an Aboriginal perspective, the National Aboriginal Forestry Association (1995a) suggests six indicators of whether Constitutionally recognized Aboriginal and Treaty rights are respected and provided for. NAFA suggests that respect and provision for Aboriginal and Treaty Rights is an essential element of SFM that could be regarded as a criterion in its own right (see NAFA 1995a, p. 5).

NAFA's "indicators" of SFM include Aboriginal participation in decision-making and forest management planning in their traditional territories, mutual learning, and healthy Aboriginal communities (see NAFA 1995a, pp. 6-8). In a discussion of Aboriginal issues in SFM, Ronald Ray (1998) identified five "benchmark issues" for Aboriginal people across Canada in forestry. Many of these issues overlap with NAFA's "indicators of SFM" and Ray's description of them is summarized below:

1. **Tenure**. Guaranteed rights to the forest and its resources are needed to participate meaningfully in its management or profit from its richness. Without access to resources, we [Aboriginal people] can only participate from the margins.
2. **Equity**[13]. We have few funds for economic development and few assets to use as collateral. This is a link back to tenure, which can help to secure equity.
3. **Training**. We need adequate training to have opportunities to be owners and managers and skilled labour in a modern industrial complex.

[13] Ray's use of the term "equity" refers to economic equity, as opposed to the "inter-generational" equity identified by Carpenter and Kessler (1999).

4. **Community development.** If all the jobs are created in some place far from home and people must leave to succeed, then what will we gain? And if the jobs left in our home lands are only seasonal and low paid, then the communities we live in will reflect those characteristics, as they often do today.
5. **Tradition**. We have traditional land, traditional knowledge of the resources we use, and traditional uses of resources. If we lose these traditions, we fail to continue to exist as a people (summarized from Ray 1998, p. 3).

Many of the issues described above are of concern to the Little Red River and Tallcree First Nations and can be expected to play an important role in development of a definition of SFM in northern Alberta.

## 3.3 Power and Empowerment

The concept of power is an important one in the practice of co-management and many aspects of power are operational within the process under study. This discussion focuses on the dimensions of power at work in the co-management process in northern Alberta, representation and power on the Board, and empowerment of the First Nation communities within the process.

### *3.3.1 Dimensions of Power*

In an examination of the concept of power from a sociological perspective, Lukes (1976, p. 34) defines the concept as follows:

> "*A* exercises power over *B* when *A* affects *B* in a manner contrary to *B*'s interests" (Lukes 1976, p. 34).

Lukes (1976) describes and compares three different views, or "dimensions" of the concept of power:

1. The **one-dimensional** view of power focuses on behaviour and decision-making on issues over which there is an observable conflict of interest.
2. The **two-dimensional** view of power also focuses on observable conflict but includes both decision-making and non-decision making. It therefore considers the exclusion of interests from the political system.
3. The **three-dimensional** view of power adds the question of control over the political agenda, a focus on latent as well as observable conflict, and the effects of collective forces and social arrangements[14].

Beckley (1996) draws upon Lukes' dimensions of power in his study of a Maine paper mill town. Beckley labels Lukes' dimensions of power the pluralistic, elitist and hegemonic models of power, as explained below:

- **Pluralistic** model (one-dimensional view): This model assumes equal access to resources that confer power and no significant barriers to political participation.
- **Elitist** model (two-dimensional view): In this model, power can be accumulated and the powerful have wealth and status. The powerful manipulate the political agenda so that many issues never reach the political arena.
- **Hegemonic** Model (three-dimensional view): This is a subtle and pervasive model of elitist power that is not recognized as such. The powerless defend the legitimating ideology of the powerful, who use their power to prevent latent conflict from being expressed (see Beckley 1996, p. 36).

---

[14] Latent conflict is hidden or not observable, while manifest conflict is latest conflict that is expressed. See Section 3.1.3.

Forest co-management in northern Alberta is practiced within the context of power relationships that include all three models of power described by Lukes and Beckley. The co-management process operates within a system that is essentially elitist, because the Government of Alberta retains all management authority and the other participants in co-management have no legal authority to address the issues under consideration (see Beckley & Korber 1996, pp. 14-15). In addition, government and industry have access to most of the resources that confer power. The establishment of co-management in northern Alberta cannot be considered truly pluralistic, because all parties do not have equal access to resources that confer power. However, the process can be seen as shift toward the pluralistic model of power, based on factors such as the allocation of tenure to the First Nations, the composition of the Board (50% First Nations), the content of the MOU establishing the process, and interview data from this study (Section 5).

Elements of the hegemonic model of power can also be seen in the co-management process under study. One of the Province's goals in establishing co-management is to avoid conflict with First Nations over natural resources (see Section 2.2.2). Deliberate avoidance of conflict is a component of Lukes' three-dimensional view of power:

> "... the most effective and insidious use of power is to prevent ... [manifest] conflict from arising in the first place" (Lukes 1976, p. 23).

Thus, according to Lukes, the powerful may avoid manifest conflict by manipulating the views of the powerless and perhaps convincing the powerless that a manifestation of conflict is not justified. The Province's view that the entire process is not concerned with Aboriginal and Treaty rights could be seen as

another example of hegemonic power, as could the First Nations' acceptance of this position (see Section 2.1.1). While agreement not to discuss Aboriginal rights issues might be interpreted as essential to allowing progress on other (perhaps more immediate) issues, this situation could also be interpreted as a subtle exercise of hegemonic power intended to prevent people from even thinking about Aboriginal rights issues (see Lukes 1976, p. 48). Although the First Nations do have other fora in which to discuss Aboriginal rights issues, leaving this issue completely off the co-management agenda could hamper the parties in their attempts to understand each others' perspectives (see Gibson et al. 1998).

Another example of hegemonic power could be seen in the organization of the institution to implement forest co-management in northern Alberta. Although the First Nations have equal representation in on the Board, the Board itself is essentially a mainstream institution. The objective of equal participation by First Nations could therefore be viewed not as an institutional adjustment and a move toward pluralism, but as another attempt to assimilate the First Nations into mainstream society. In order to avoid this situation and achieve power sharing with this mainstream institution, the First Nations must have strong and effective representation on the Board.

### *3.3.2 Representation within the Co-Management Process*

Although representation is essential to the practice of co-management, the representation issues have received little attention in the co-management literature. Co-management is practiced by people from different groups, working together within some kind of institutional framework. Those participating in the practice of co-management can be thought of as "representatives" of the groups involved. In a seminal work, Pitkin (1967) explained the application of the concept of representation:

> "...representation is not needed where we expect scientifically true answers, where no value commitments, no decisions, no judgment [sic] are involved" (Pitkin 1967, p. 212).

The substance of representation is "to act in the interest of" someone else (Pitkin 1967, p. 208) and representatives "must pursue their constituents' interest" (p. 213). Co-management participants can be thought of as representing at least two sets of interests and thus obliged to pursue both the interests of the parties they represent and the joint interests of the co-management process. In addition to their other responsibilities, co-management practitioners must balance these two sets of interests and attempt to manage conflicts between them.

The issue of the interests actually represented in co-management is an interesting one that deserves further attention by academics and co-management practitioners. In "comprehensive co-management" (see Section 3.1.1) the main interests represented are those of the Aboriginal claimants, the Federal government and the Territorial governments. The "public interest" is presumably represented through government appointments (see Swerdfager 1992). While more interests are represented in "crisis" and "strategic" co-management, there is no information available on the actual interests represented in co-management processes in Canada. In the process under study, the parties represented on the Board are the First Nations, the Provincial Government, the forest and oil and gas industries, and the Municipal District of Mackenzie. While each of these parties could be seen to be seen to be representing a number of different interests, it also appears that a number of interests are not represented on the Board. These interests include those of the agricultural and tourism industries and recreational land users. These latter interests might be represented by current Board members of perhaps included in the Board's consultation processes. Questions of the

interests that should be represented on the Board are beyond the scope of this study but deserve further consideration.

Representation is clearly an important issue for all of the parties on the Board. To ensure effective representation, they need to pay more attention to representation issues, including the qualifications of their representatives and the form of their representation in the process. In addition to representing the interests of their constituents, effective representatives must be responsive to their wishes (Pitkin 1967, p. 213). People being represented have a relevant claim to a say in their interest (Pitkin 1967, p. 210) and representatives need to have ways of communicating with their constituents. Looking at existing methods of communication /information sharing between Board members and their constituents is thus one means of examining the issue of effective representation on the Board.

Another way of examining the concept of representation is to look at forms of representation within the Board process. Borrini-Feyerabend (2000, p. 7) identifies three forms of representation in collaborative management: self-representation, direct representation and indirect representation (see Figure 7). She points out that indirect representation systems:

> "are rarely appropriate to convey the specific, detailed concerns of small groups of stakeholders, and surely cannot deliver the full range of knowledge and skills of local resource users" (Borrini-Feyerabend 2000, p.7).

Different forms of representation are apparent in the co-management process in northern Alberta. The interests of the First Nations and Industry are represented

directly, while the interests of most stakeholder groups can be expected to be represented indirectly. The interest of Government is represented indirectly and the question of whether Government Board members represent the public interest remains unanswered. Using the criterion of communication with constituents, the answer would have to be "no" in this case, unless the Government members have mechanisms available to consult with the public in order to determine what their interest is. Self-representation is also present within forest co-management in northern Alberta. Self-representation occurs internally within the First Nations and would be required for expert representation in the process.

**Figure 7. Forms of Representation**

| Form of Representation | Description |
|---|---|
| Self- | Face-to-face, people personally express their opinions, offer a material contribution, receive a benefit, represent themselves. |
| Direct | People delegate others to represent them, but maintain a direct, face-to-face relationship with their representatives. |
| Indirect | People delegate others to represent them but they rarely – if ever – interact with their representatives on a face-to-face basis. |
| Source: Borrini-Feyerabend 2000, p. 7. | |

From this initial consideration of the concept of representation in co-management, it seems clear that attention to representation issues will have an impact on the human resource considerations associated with co-management. Fulfilling the requirements for effective representation will place additional duties on practitioners from all parties involved in co-management. Pitkin (1967; p. 239) explains why this effort is necessary:

> "No institutional system can guarantee the substance of representation. We need to retain the idea of the substance of representation ...[and] ... cultivate persons capable of looking after the interests of others in a responsive manner".

### *3.3.3 Community Empowerment*

Empowerment of local resource users is a key objective of many co-management arrangements and is linked to larger questions of equity and social justice (see Benedickson 1992; Borrini-Feyerabend 2000; Brosius et al. 1998). It is in the interests of all parties involved in co-management in northern Alberta to address existing socio-economic inequities between the First Nations and other Albertans. Addressing these inequities will ultimately involve a change in power relations and some transfer of power from mainstream society to the First Nations. Friedmann (1992) points out that both collective and individual effort is required to affect social power relations and increase the social power of disempowered members of society. The collective efforts of the First Nations have resulted in the negotiation of an agreement that provides the First Nations with an opportunity to change existing power relations in the management of forests (and potentially other natural resources) in northern Alberta. The efforts of individual members of the First Nations will be necessary to take advantage of this opportunity and empower their communities within the co-management process.

According to Kelly & Alper (1995), empowerment can happen independently of any particular process outcome. The concept of empowerment is central to a "transformative approach" to the assessment of shared decision-making processes. Kelly & Alper (1995, p. 13) define empowerment as "the experience of greater sense of self-worth, security, self-determination, and autonomy". Measurement of these types of variables is beyond the scope of this study. Empowerment of the First Nations within the process can be inferred by observing the degree of First Nation knowledge of and participation in the forest co-management process, and by asking study participants about their perceptions of the potential of the First Nations to influence the process.

## 4.0 RESEARCH METHODS

The major method of data collection for this study was semi-structured interviews with Board members from the First Nations, Government, and Industry, and Community members from the Little Red River Cree Nation and Tallcree First Nation. The First Nations participated in design of the interview questions, selection of First Nation participants and conduct of interviews. Interview data were recorded and transcribed and then analyzed via the identification of themes and development of a coding system. The coding system was applied to all of the data with the assistance of a qualitative data analysis program. Non-participant observation and document review were used to triangulate findings from the interview data. Preliminary findings from this project were presented both verbally and in writing to the Cooperative Management Planning Board and the First Nations.

I collected data empirically and analyzed it inductively, using a grounded theory approach (Glaser and Strauss 1967) as described by Babbie (1999, p. 261):

> "... grounded theory begins with observations and then proposes patterns, themes, or common categories. This does not mean that researchers have no preconceived ideas or expectations; in fact, what has been previously learned will shape the new search for generalities. However, the analysis is not set up to confirm or disconfirm specific hypotheses".

Some of the themes I identified during analysis confirmed the findings of other co-management researchers, providing transferability of findings (Bickman and

Rog, 98, p. 95). Other themes offered opportunities for theorization and suggestions for further research.

### 4.1 Designing the Semi-Structured Questions

Based on a review of co-management and natural resource sociology literature (see Section 3.1.2), my supervisor and I designed a semi-structured "Interview Guide" for conducting interviews with Board members, support staff from the different parties to the Board, and First Nation Community members (see Appendix B). Our questions focused on issues such as priorities for the Board, opportunities for the Board to achieve its overall objectives, and challenges for Board members and the parties involved in implementing the process.

A challenge in designing the questions was how to confirm the findings of previous researchers without giving participants hints about how to answer. For example, the issue of trust is considered extremely important in the success of co-management arrangements, but we had to be careful not to ask participants whether trust was important. Because we wanted participants to identify the factors that they thought were important, a series of open-ended questions was used. The Interview Guides for this study were reviewed by the Human Ethics Committee of the Faculty of Agriculture, Forestry and Home Economics, University of Alberta and approved on February 22, 1999. The Interview Guides were also reviewed by the First Nations as part of the entry negotiation process, described below.

### 4.2 Negotiating Entry

Because this research originated based on a request from the Little Red River Cree Nation, we did not anticipate a difficult or time-consuming process of negotiating entry into the First Nation communities. While entry negotiations

were at no time difficult, they turned out to be quite time-consuming. We had eight meetings with First Nation leaders, staff and community members between June, 1998 and March, 2000. The meetings served to provide background and context for the research, to clarify research objectives and to obtain feedback on interview questions and preliminary findings. Meetings were held in Edmonton and in communities within the Special Management Area.

Funding for the project commenced on July 1, 1998 and we originally planned to conduct interviews during the summer of 1998. However, unavailability of First Nation community leaders and inactivity of the Board combined to delay the field work until 1999. We received written support for the project from the First Nations in November, 1998. We presented an outline of our research and a proposed schedule to First Nation leaders and community members at a meeting in Fox Lake on March, 19, 1999. At this meeting we received approval to proceed with interviews and other aspects of the field work.

The entry negotiations with the First Nations reinforced the importance of adapting the research schedule to suit the communities (Rossman and Rallis, 1998, p. 101). Another important factor influencing the scheduling of this project was the status of the Board. The Board was inactive throughout most of this project, while negotiations were ongoing between the First Nations and the Government of Alberta. We were concerned that the negotiations might affect our ability to conduct research and that some individuals involved in the co-management process might be reluctant to participate in interviews. We therefore attempted to obtain written support from senior staff at Alberta Environmental Protection, supporting the research and the participation of government staff. Although written support was not received, Government Board members and support staff did participate in interviews.

Entry negotiations were not required to obtain industry participation in the study. Industry Board members and support staff were willing participants in interviews and also supplied extensive documentation related to forest management in the Special Management Area.

### *4.2.1 Liaison People*

As part of the entry negotiation process, the First Nations identified "Liaison People" to work with me in collecting data. The liaisons were salaried Band employees who were interested in the research and provided research assistance in addition to their regular work duties. The liaisons had a variety of duties, including those listed below:

- Acting as contacts within the First Nation administration.
- Reviewing the research objectives, research questions and interview guides to ensure that questions were worded appropriately and that issues of importance to the First Nations were addressed.
- Acting as guides within the communities, contacting potential participants and introducing me to prospective participants.
- Facilitating travel between the various First Nation communities.
- Attending interviews with First Nation and non-First Nation participants.
- Serving as interpreters as required.

The Liaison People proved to be absolutely essential to the success of data collection in the First Nation communities. Without their assistance, I doubt whether I, as an outsider and non-native, could have gained access to community members or permission to conduct interviews within the time frame available. In order to work with the Liaison People, I had to give up any control over the

sampling process within the communities. This situation is discussed in more detail in section 4.4.

An unfortunate consequence of the Liaison People being employed full-time by the Band Council was that they had many other duties and could only devote occasional time to this research. For example, one Liaison Person's other duties included organizing local fire crews, with the result that he was often available only after 11:00 p.m. Unavailability of Liaison People caused many delays in obtaining access to participants and conducting interviews in the First Nation communities.

### 4.3 Sampling

I used non-probability sampling methods, consisting of "...selection based on pre-specified project requirements and information gained during the data collection process" (Pituckmahaket et al., 1989, p. 30). The sampling strategy for Board members was "purposive or judgemental [sic]" (Babbie 1986; 1999) or "purposeful" (Bickman & Rog, 1998). Purposeful sampling is

> "...a strategy in which particular settings, persons, or events are deliberately selected for the important information they can provide that cannot be gotten as well from other choices." (Bickman & Rog, 1998, p. 87).

I deliberately chose people who were past, present or potential future Board members, from all parties to the Board. Individuals were identified based on contacts made during the entry negotiation process, referrals by people involved in the process, and review of previous Board and Technical Committee Meeting Minutes. I attempted to contact all individuals identified in the Minutes.

The sampling strategy for First Nation community members was snowball sampling (similar to a referral system, as explained by Pituckmahaket et al. 1989, pp. 35-36), beginning with Liaison People and other contacts made during entry negotiations. I complied a list of individuals who had been identified during discussions with the First Nation and reviewed the list with my Liaison People. They then attempted to contact individuals on the list. The Liaison People and I agreed that we would try to interview a cross-section of community members, including elders and youth, women and men. As alluded to earlier, the Liaison People essentially had full control over the selection of First Nation participants. As a non-Cree speaker and an outsider on the reserves, I had little or no access to community members. I had to rely completely on my Liaison People to approach prospective participants on my behalf.

### 4.4 Conducting Interviews

Interviews were conducted between July and October, 1999. At the end of June, 1999, I moved to Fort Vermilion with my daughter and this was the location from which the bulk of the interviews was organized. I made initial contact with some participants by telephone. The Liaison Person was responsible for contacting potential participants in the First Nation communities. All prospective participants were offered copies of the Interview Guide for review prior to the interview, along with a Consent Form and Information Sheet (Appendix C). Many participants asked for time to review the questions before consenting to an interview. Once verbal consent had been obtained from a participant to conduct an interview, a time and place was mutually agreed upon.

Participants were interviewed in locations convenient for them, such as their homes or offices. Several interviews were conducted in Band Council facilities, while others were done outdoors in the boreal forest. I interviewed participants in nine different Alberta communities, including four First Nation Reserves and four

towns in northern Alberta. I returned to Edmonton at the end of August, 1999 and conducted a few interviews there. The total sample size for the semi-structured interview was 23, consisting of 13 Board members and support staff from all parties to the Board, and 10 members of the Little Red River and Tallcree First Nations. The community sample included four youth and three elders, eight men and two women.

I was present at all of the interviews. Twenty-two interviews were conducted face-to-face, while one was done over the phone. I was alone with the participant for 12 of the interviews. I was accompanied by a Liaison Person during eight interviews and by my daughter during two interviews. The Liaison Person left part-way through one interview but returned before it was complete. A comparison of the contents of the interview transcripts suggests that the presence of more than one interviewer had little effect on the responses. Participants gave similar answers to many of the questions, regardless of the number of interviewers present. Both of my Liaison People declined to participate in some interviews with community members. They suggested that community members would be less likely to share their views openly if another community member was present.

I used the Interview Guides (Appendix B) as templates for conducting interviews. Issues raised by participants were also explored during the interviews, and we then returned to the Interview Guides, if necessary. Many participants answered more than one question at a time, shortening the number of questions I asked at the interviews. This happened often and led me to think that the Interview Guides might have too many questions, or perhaps too many similar questions. However, in an attempt to ensure consistency, I tried to ask all participants all of the questions.

First Nation participants (including support staff) were offered tobacco at the beginning of each interview. The form of tobacco offered varied depending upon availability and my knowledge (if any) of the participant's preferences. For example, if the participant smoked, I would try to find out their preferred brand of cigarettes. If they did not smoke, I offered them loose tobacco, which is used for medicinal and ceremonial purposes. . Twenty interviews were conducted in English. Three were done in Cree, with the assistance of the Liaison Person as interpreter. I asked all participants for permission to record the interviews and gave them the option of my using the tape recorder or taking notes. Twelve participants allowed me to use the tape recorder, while 11 said I could take notes. I was surprised with the high percentage of participants who would not consent to use of a tape recorder.

### *4.4.1 Consent*

Consent was obtained from all study participants via a written "Consent Form" (Appendix C). Consent was discussed with participants during the introduction to the interview, along with the purpose of the study. Participants were given the option of signing the Consent Form before or after answering the questions. Most chose to sign after completion of the interview. No copies were made of the signed Consent Forms. I gave them to my Supervisor for safekeeping at the end of the field season.

The Consent Form gives us permission to use and publish information from the interviews, provided participants' names are not used. However, the Information Sheet states that we may identify participants by their affiliation and this caused concern among some participants because of the small number of people involved in the process being studied. Three study participants gave their consent only on the condition that we not identify their affiliation.

### *4.4.2 Informal Interviews*

In addition to the interviews described above, I conducted informal interviews with five people interested in the co-management process in northern Alberta. Two of these people were indirectly involved in the co-management process but would not agree to formal interviews. Three were not directly involved in the process. I took notes at these informal interviews but did not transcribe the notes or include them in the data analysis.

### *4.4.3 Refusals*

A total of seven potential participants declined to be interviewed. Those declining were from all parties to the Board and the most common reason given for declining an interview was lack of sufficient knowledge to respond to the questions in the Interview Guides. The status of negotiations between the parties to the MOU appeared to have an effect on some people's willingness to participate in interviews.

## 4.5 Triangulation

In addition to semi-structured interviews, other sources of information for this project included non-participant observation, review of Board documents, and review of other documents produced by the parties to the Board. These additional sources of data provided background on the co-management process, context for interpretation of interview data, and a means of triangulating findings.

### *4.5.1 Other Sources of Data*

In addition to entry negotiation meetings, I attended various meetings held by parties to the Board, including First Nation advisors' meetings and a negotiation session between representatives of the Little Red River Cree Nation and the

Government of Alberta. I also attended community events, including the Little Red River Cree Nation Treaty 8 100th Anniversary commemoration, and various summer fairs within the Special Management Area. I attended the inaugural meeting of the newly constituted Board as an observer, and presented the findings of this study to the Board at its second meeting.

In addition to observation, other sources of data were Board documents, including previous Meeting Minutes and other background documents, and various reports, policy and planning documents prepared by parties to the Board.

### *4.5.2 Role of the Researcher*

There is much discussion in sociological texts about the role of the researcher, especially in relation to observation. The researcher's role is sometimes described along a continuum from complete participant, to participant-as-observer and observer-as-participant, to complete observer (see, for example, Burgess, 1984, p. 80; Babbie, 1999, pp. 264-265). Babbie (1999, p. 265) notes that "...the field researcher frequently chooses a different role from that of complete participant" and I chose to maintain a role closest to "complete observer" throughout this study.

My role as an observer was important in securing the co-operation of all parties to the Board. Some participants in the co-management process expressed misgivings about the project originating in the First Nations and the potential for the research to be biased in favour of the First Nations. In discussions with potential respondents, both my supervisor and I emphasized that this study was about assisting the cooperative management planning process to succeed, not about finding fault with existing procedures. While we did need to ensure that First Nation concerns were addressed, we made a conscious effort to remain neutral. During the data collection phases of this project, I received no overt indications

that this study was not supported by the parties to the Board. Participants from all parties eventually shared their views with me in an open and forthright manner.

My role as "complete observer" was particularly important in two other aspects of this project. During the field work phase of the study (June – August, 1999), I lived in the region and traveled extensively in the Special Management Area. By visiting sites of local and historical interest, attending public social events, and just "hanging out" at the coffee shop in Fort Vermilion, I was able to learn more about the local context for the application of co-management and observe interactions between residents of the Special Management Area. This information proved valuable in evaluating some of the findings from the interview data. My role as observer also assisted in the presentation of findings to study participants and others involved in implementing co-management in northern Alberta. Acceptance of my position as an outsider, and of this study as an independent assessment of the process, was critical to acceptance of the results of this study. I received positive feedback about the findings from Board members from all parties to the Board and from First Nation community members.

### 4.6 Data Analysis

Transcription of all 23 interviews generated 176 pages of interview data. I began the onerous task of analysis using an "open coding" procedure (Neuman 1994), similar to content analysis as described by Berg (1998). I read the transcripts and wrote major concepts/themes in the margins. I then transferred the themes to larger pieces of paper, initially under the headings of "structure", "process" and "content". These headings were based on the initial research questions used to guide the study (see Section 1.1). As the pieces of paper containing the themes grew longer and longer, I began the process of axial coding to identify key concepts or themes and linkages among themes (Neuman 1994; Strauss & Corbin 1990). This stage of the analysis was very time-consuming, due in part to my use

of pre-existing categories. As Bickman & Rog (1989, p. 90) explain, the process of fracturing and categorizing data can create "analytic blinders", making it difficult to escape the categories initially established.

I eventually escaped from the categories of "structure", "process", and "content" through various means including discussions with my supervisor, a review of literature on representation and other issues identified in the interviews, and further consideration of linkages between themes in the data. I used a qualitative data analysis program (QSR NUD*IST, *Non-numerical Unstructured Data Indexing Searching and Theorizing*) to assist in organizing and exploring themes within the interview data, and found the program helpful in identifying connections between themes. I developed an initial coding system, consisting of two major themes and 15 sub-themes. I applied this coding system to the interview data and found that it captured all of the themes apparent in the interviews. Based on further review of linkages between themes, and on feedback received after presentation of study results [15], I made a few modifications to the coding system. The modified coding system is shown in Figure 8.

[15] Some findings from this study were presented at the Canadian Indigenous and Native Studies Association Conference (Edmonton, May 2000) and the International Symposium on Society and Resource Management (Bellingham, WA, June 2000). More detailed reports of the findings were presented to members of the Cooperative Management Planning Board and the Little Red River Cree Nation in June, 2000.

Using the modified coding system, I looked for patterns in the interview themes. I noted similarities and differences among interview responses and looked for differences in answers given by participants from different groups (e.g., government, industry, and First Nation Board members; First Nation Board members and First Nation community members). I found that there were many overlaps between some of the themes in my final coding system, but decided that there was sufficient variability within each theme to allow the themes to stand as they were. I used inductive reasoning to arrive at explanations that "fit" the data (see Glaser & Strauss 1967, p. 3). Once I felt that I was able to explain the interview data, I returned to the literature, to compare my findings with those of other researchers and generate practical advice to the participants in the study and the parties involved in co-management.

**Figure 8. Coding System for Interview Data**

**1. Sustainable Forest Management**
- 1.1 Definitions
- 1.2 First Nation values
- 1.3 How to Achieve SFM
- 1.4 Barriers

**2. Conflict Resolution**
- 2.1 Expectations
- 2.2 Types of conflict
  - 2.2.1 Between parties to the Board
  - 2.2.2 For Board members
- 2.2 How to resolve conflict
  - 2.2.1 Relationships and Trust
  - 2.2.2 Consensus
  - 2.2.3 Board Processes
- 2.3 Empowerment
  - 2.3.1 Ways to inform community members
  - 2.3.2 Representation

## 4.7 Reliability and Validity Issues

Reliability and validity of data are issues in all scientific studies, but are especially of concern in qualitative research because replication is more difficult and threats to validity must often be dealt with after the research has begun (Bickman & Rog 1989, p. 91).This section discusses reliability and validity issues in this project and the measures taken to address them.

**Reliability** refers to "the constancy of the method and its measurement process when re-applied under differing but standardized conditions" (Boonchalaski 1989, p. 15). The major reliability issues associated with this project relate to the use of interviews as the main method of data collection and the use of a single observer (interviewer) as the main source of data (see Babbie 1999, p. 111). Measures taken to increase reliability of interview data included application of consistent procedures for interviews. All participants were provided with the questions in advance, consent and background information were discussed first, and I attempted to ask all questions to all people interviewed. The questions asked were open-ended and intended to increase question reliability, i.e., ensure respondents answered them in the same way (see Fowler 1993, p. 70). While the answers given by study participants varied greatly in their content, most participants provided similar kinds of answers to most of the interview questions. If a participant was unsure about the kind of answer expected, I used examples from the literature to assist them. If I was unsure about the meaning of a statement made by a participant, I asked them for clarification. These procedures address some of the reliability concerns related to use of a single observer. Other measures taken to address reliability concerns included my transcription of all interview tapes, use of triangulation (see Section 4.5), and the participation of First Nation Liaison People in approximately one-third of the interviews. I often discussed the results of individual interviews with the Liaison People, and we rarely, if ever, had different interpretations of the results.

**Validity** refers to the ability of an empirical measure to accurately reflect the real meaning of the concept it is intended to measure (Babbie 1999, p. 113). Validity of interview questions is an issue in this project, and the design of questions was intended to incorporate both construct and content validity (as defined by Babbie 1999, pp. 113-114). Construct validity refers to the logical relationship between measures (questions) and the concept being measured, while content validity refers to the ability of measures to cover the range of meanings included in the concept. Questions were based on documented factors affecting the success of co-management, and on concepts used by participants in their discourses related to forest management. My previous experience working with Aboriginal people in co-management enhanced my understanding of the answers given by respondents and my ability to question their answers. Validity of the interview questions was improved by asking participants a number of similar questions, and checking the extent to which participants' answers were internally consistent (Fowler 1993).

The validity of conclusions drawn from the interview data was improved using evidence collected during the research, in an attempt to make "alternative hypotheses" impossible (Bickman & Rog 1989, p. 91). Evidence from sources other than interviews was used to confirm or refute findings based on analysis of interviews. Validity was also enhanced via member checks, or presentation of preliminary findings to study participants. Issues relating to researcher bias and reactivity were addressed through my maintenance of the role of observer / outsider throughout the course of the study. I found that most participants in this study, especially Board members, were more than willing to share their opinions with someone who was knowledgeable about the process but not directly involved. The degree of candor with which many participants spoke, while surprising, contributed greatly to the understanding of issues and development of advice to those involved in the process.

# 5.0 FINDINGS AND DISCUSSION

Some findings have been included in earlier sections of this thesis and are only summarized briefly here. A review of existing typologies of co-management suggests that the forest co-management process in northern Alberta is a form of strategic co-management with features of both the "comprehensive" and "crisis" types. The process also includes elements of the industrial forestry approach (see Section 3.1.1). Forest co-management in northern Alberta is part of a paradigm shift from "sustained yield" to "sustainable" forest management. The co-management process builds on existing policy and is an important step toward real recognition of other values in forest management practice in Alberta.

The parties involved in co-management in northern Alberta have demonstrated a commitment to the process, which has been ongoing since 1994. The two parties to the MOU have continued their dialogue despite periods of disagreement and this attitude bodes well for future implementation of the co-management process. The First Nations and the Government of Alberta have different goals for the process. The Little Red River and Tallcree First Nations are seeking influence over natural resource management in their traditional territories, while Alberta is seeking avenues for consultation and cooperation with First Nations. Conflict avoidance and economic development are common objectives for both parties. Aboriginal rights issues have supposedly been left off the agenda but remain an underlying motivating factor for both parties.

The results reported above and in Section 3 are based mainly on non-participant observation and review of documents. The results reported in this section are based mainly on interview data, supplemented by the other sources of data identified in Section 4.5.1. The term "participants" means all study participants

(total sample = 23). This includes 13 Board members/support staff and 10 First Nation community members. Based on these sample sizes, the findings reported here cannot be generalized to the First Nation communities. The sample for the Board was essentially exhaustive and includes all Board members/support staff who could be contacted and would consent to a formal interview. I thus have a high level of comfort in generalizing the findings from the Board subsample to the Board as a whole.

In this section, the term "First Nation participants" means participants who are also members of the Little Red River Cree Nation or the Tallcree First Nation (n=12). "Board members" means Board members and support staff from all parties to the Board (n=13). "First Nation Board members" means participants attending Board meetings or providing support to the Board on behalf of the First Nations (n=6). "Community members" means members of the Little Red River and Tallcree First Nation communities who are not Board members (n=10). Potential benefits of the co-management process are described in Section 5.1. The remainder of section 5 is organized according to the major themes in the interview data and Section 3 of this thesis.

### 5.1 Benefits of Forest Co-Management in Northern Alberta

The process of co-management in northern Alberta has produced benefits for those involved, including the development of working relationships between the First Nations and industry (Forestry Chronicle 1998); the development of a formal relationship between the Government of Alberta and the First Nations (Interview data); participation in research and related capacity-building in the First Nation communities, and allocations of timber to the First Nations. The co-operative approach associated with the process of co-management was strongly supported by all participants in this study. The words of one participant offer a succinct summary of potential benefits and confirm findings from the academic literature:

*"There could be lots of benefits over a long period of time"* (interview #15, lines 14-15).

Study participants identified many benefits that they could see resulting from the practice of co-management in northern Alberta. Common benefits identified by participants are described below.

- **Relationships**. A majority of participants identified building of relationships as the most important benefit of the co-management process. Several mentioned the establishment of a formal relationship between the First Nations and government, while others talked about relationships between the First Nations and industry. The concept of "cultural exchange"[16] was important to a number of participants, who recognized opportunities for all parties to share ideas and learn about and from each other:

  *"It would be exciting if there [were] no lines in between the groups. If that can happen ...." (interview #12, lines 325-326).*

  *"... the opportunity to mix with First Nations and environmental groups and others and express viewpoints and cultures. Not just Native culture, but business culture and government culture and other cultures." (interview #31, lines 5-8).*[17]

  *"The rules and regulations won't be one-sided, just from one group, but from different groups and cultures. We all have*

---

[16] "Cultural exchange" refers to opportunities for the different parties on the Board (First Nations, government, industry) to interact, share ideas, and learn about each others' viewpoints.

[17] The interview numbers are part of a coding system that enabled me to identify the participant being interviewed. This coding system does not correspond to the sample size for the study.

*different views ... native people and white people might look at things differently. By getting together, we can have a better understanding of each other's values. What is significant to one group may not be to another, but if they can sit down and work out their differences, hopefully it will be good for all people and all walks of life." (interview #114, lines 39-47).*

- **Economic development**. Economic development was seen as an important potential benefit, especially by Community members. Specific economic benefits identified by participants included jobs for young people, increased First Nation awareness of economic opportunities, employment and training for First Nations people, keeping young people in the communities, and timber volumes for the First Nations.
- **A voice for First Nations**. Many participants thought that having a say in management, or an opportunity to include First Nation values in forest management, was an important benefit. Both Community members and Board members talked about the importance of respect for First Nation land uses. First Nation participants frequently mentioned the need to make logging "safer" for the environment and more compatible with First Nation uses of the forest. Some Community members recognized the need for First Nation voices to be balanced with the voices of others using the land:

  *"... we should share equally, recreationally, industrially, no one group of people should be left out." (interview #112, lines 125-127).*

- **Conflict avoidance**. Many Board members thought that the co-management process was a vehicle for identifying potential conflicts between parties and avoiding or reducing them. Some Board members suggested that there was

real potential for social protest over conflicting land uses in the SMA. Most Community members talked about conflicts between community uses of the forest and logging practices, and hoped that these conflicts would be reduced as a result of the co-management process.

Other potential benefits identified by participants included clarification of resource management roles, greater certainty for industry, agreement on development of forest management plans, and improved community knowledge about forestry and other activities on the land.

## 5.2 Factors Influencing Success of the Process

Many factors that the literature identifies as important to the success of co-management were seen as important by participants. Communication was an issue for a few Board members and there were some communication gaps between the parties to the MOU and the other parties to the Board. Communication between First Nation Board members and the communities was a major issue for Community members and is discussed in Section 5.5.2. Other issues that participants identified as important to success of the process are discussed below.

### *5.2.1 Trust*

Trust between the parties is an important factor in the success of co-management, as discussed in Section 3.1.2. Trust was an issue for some Board members, who identified the need for trust-building within the process:

> *"There isn't that much trust of government and industry among First Nations." (interview #15, lines 102-103).*

*"We didn't trust First Nations and First Nations didn't trust those government guys." (interview #22, lines 301-303).*

*"There will need to be trust-building first. It is easy to build trust, by working together, but even easier to destroy it. One mistake can erase years of trust-building and good relationships." (interview #32, lines 44-47).*

In addition to trust-building among parties to the Board, there also appears to be a need to develop trust with other stakeholders in the co-management process:

*"... some of ... the organizations that the Board represents ... had some pretty negative interaction with environmental groups over the year. There's going to have to be some trust-building ..." (interview #22, lines 159-163).*

The need for trust-building was addressed in the advice provided to the Board as part of this study (see Section 6.3).

### *5.2.2 Common Goals*

The issue of common goals is basic to the functioning of a co-management institution (see Section 3.1.2) and was very important to Board members. A majority of Board members identified a need to clarify expectations, definitions, roles, and responsibilities. The failure to discuss and agree on common goals was seen as a major shortcoming of the previous Board process. The following excerpts illustrate Board members' responses to the questions of what the Board's immediate priorities should be:

*"...to basically get a clear understanding as to what we should be doing with the MOU." (interview #12, lines 40-41).*

*"Based on past failures, the immediate priority is to clearly understand definitions... (interview #13, lines 20-21).*

*"Probably establishing priorities. In terms of what the MOU should deal with. " (interview #22, lines 31-32).*

*"The number one priority is to clarify expectations. What the Board is expected to do, what is expected from the MOU. The Board didn't do that very well the first time, and then everyone comes in with their own visions and everyone goes out with different expectations. ... The roles and obligations have to be clarified." (interview #24, lines 28-34).*

*"This is the most pivotal question, for me. The Board did a horrible job the last time. Everyone came with their own agendas. We need to leave the guns at the door. What I see as the Board's priorities, these are in order. One, a clear definition of the Board's role ..." (interview #31, lines 37-40).*

*"First, to define their role ... The Board has to get people to buy into what they are doing." (interview #32, lines 37-38).*

*"Number one, what is their role and responsibility." (interview #33, line 23).*

Many Board Members thought that the process of exploring these issues and agreeing on common goals would be an important learning experience for themselves and other members of the Board. The need for development of common goals was part of the advice provided to the Board as part of this study (see Section 6.3).

### *5.2.3 Human Resources*

Human resources are an important factor in this co-management process, as they are in many others (see Section 3.1.2). Participants identified a wide range of qualifications that they thought Board members needed in order to be effective participants on the Board. These qualifications included: technical knowledge of forest management issues; good communication skills; practical knowledge of activities occurring in the forest; understanding of First Nations culture; experience with dispute resolution processes; knowledge of organizational processes, including the conduct of meetings and negotiations; and general comfort with the language and institutions of mainstream society. This is an impressive list of qualifications that most individuals would have trouble fulfilling. Some study participants thought that few First Nations people currently have the required skills to participate as effective Board members. However, given the number of skills required by Board members, it is likely that all parties to the Board will have difficulty finding individuals with the required qualifications to serve as effective Board members.

Many participants, particularly Board members, were aware of the human resource requirements associated with implementing co-management. Board members recognized the need for various types of staff support and all parties to the Board reported that staff were in place to support the co-management process. However, all staff (including Board members) appear to be expected to sit on and/or support the Board in addition to performing their regular duties. Some

Board members expressed concerns about management of staff time, as staff would have to delay other work in order to work on Board business. Board members from all parties also expressed concerns about having to hire additional staff to support the Board.

Board members made numerous suggestions for specific types of expertise that might be required to assist the Board in conducting its work. These suggestions included process- and trust-building facilitators, an administrator or manager for the Board process, and specialists in public consultation, natural sciences, and social sciences. There was agreement among Board members that establishing the Board was an advantage in terms of securing resources to support the Board process and that involvement of other parties was important in accessing human resources to support operation of the Board. Advice to the Board (see Section 6.3) recommended use of a facilitator to assist the Board in charting new institutional territory.

### *5.2.4 Involvement of Other Parties*

Involvement of other parties was recognized as critical to successful implementation of the co-management process. There was general agreement among participants that the co-management process presents major opportunities to involve other parties in forest management. Board members considered the support and cooperation of third parties to be crucial in gaining support for the Board's consideration of integrated resource management issues (see Section 5.4.3). Board members identified a number of other parties that should be involved in the process, including industrial interests, Provincial and Federal government agencies, research groups, and First Nation elders and youth. Some Board members identified opportunities for collaboration with third parties on issues of mutual interest (e.g., between First Nations and environmental groups on the issue of ecosystem protection). It was also suggested that working with third

parties, particularly environmental groups, could present challenges for all parties on the Board.

Most Board members suggested a need to develop procedures for identifying and involving stakeholders. Several proposed that there be different levels or groups of stakeholders, with different procedures for each group. Some Board members suggested that a process was needed for the Board to interact with experts and that process should ensure that the Board remained in control. Several Board members suggested that First Nation elders should be recognized as experts on some issues. Concerns were raised about the degree of third-party involvement and its impact on the Board's ability to function:

> *"... the problem is, how many stakeholder groups do you involve and what's your scale ... do you want to have international stakeholders involved, or do you want groups that are based in .... Calgary and Edmonton ... (interview #22, lines 232-236)*

I could not help but notice that none of the Board members interviewed mentioned the need to involve women in the process. Non-participant observation and a review of Board documents confirmed that women have not been involved in Board meetings and that the process to date has not included any specific measures to identify or address women's concerns regarding forest management in the SMA. I raise this issue because women do use the forest and they may use the forest in different ways than men (Tanja Schramm, PhD. Student, Department of Renewable Resources, University of Alberta, personal communication). Previous research done in Fort Liard, N.W.T., suggests that women's use of the forest may be affected by industrial forestry and that women receive few of the benefits (i.e., jobs) associated with industrial forestry (see Beckley & Hirsch 1997). Thus a consideration of women's interests may be necessary to ensure

equitable distribution of the costs and benefits associated with the expansion of industrial forestry in northern Alberta.

Community members also suggested that other government agencies and industrial interests should be involved in the co-management process. In addition, they identified a number of groups within the community that need to be involved, including women, leaders, traditional land users, trappers, and staff people in Economic Development, Education and Health. Representation of First Nation community interests is discussed in Section 5.5.1. Advice provided to the First Nations as part of this project is summarized in Section 6.4.

### *5.2.5 Equality of Partners*

Although equality of the partners is identified as an important factor in co-management (see Section 3.1.2). equality issues did not seem to be a major concern to most participants. Equality of power among the parties in the process was identified as a potential benefit of the process:

> *"The government would benefit, industry would benefit, the First Nations people would benefit. They would all have equal opinions. No one group of people would have more authority over the other group, or more power." (interview #112, lines 102-106).*

A few participants mentioned the importance of equality of authority and skills among Board members from different parties:

> *"The people on the Board have to be of equal power, have equal authority to make decisions." (interview #32, lines 19-21).*

*"... you need to have people with matching skill sets interacting with each other. If you don't, then you're at a structural disadvantage, at a language disadvantage, and you can be manipulated because ... you don't understand the rules ..." (interview #16, lines 807-813).*

In terms of the overall distribution of power on the Board, most Board members thought that First Nations involvement was meaningful. Several suggested that the First Nations were the most powerful party on the Board:

*"... they [the First Nations], not only did they have representation on there, they were the controllers. They controlled the dollars, they controlled the staffing, so they had a potential to have a very big influence" (interview #116, lines 213-216).*

*"...to a large extent, they [the First Nations] drove the Board business. A lot of the agenda they brought forward and we would participate in making decisions" (interview #21, lines 600-602).*

*"They [the First Nations] have a ... double vote[18]. Essentially they can control the outcome (interview #33, lines 156-158).*

The structure of the Board (with the First Nations holding 50% of the seats) is certainly conducive to the First Nations having influence at least equal to that of the other parties. The First Nations also have tenure to a large share of the timber

---

[18] The "double vote" is a provision of the MOU that requires any votes taken by the Board to be approved by both a majority of Board members and a majority of First Nation Board members. This provision is apparently intended to counterbalance a second review by government, when the Board's recommendations are reviewed by the Alberta Minister of Environment (Honda-McNeil 2000).

resources in the SMA, increasing the likelihood that their Board members' concerns will be heard. When issues of equality among Board members are taken into consideration, however, it is apparent that the First Nations are not yet participating as equal partners in the Board process.

An examination of Board membership reveals that Government and Industry have both appointed senior people to the Board. The First Nation originally appointed its Chief and some of its Councillors to the Board, with the Councillors having a level of authority roughly equivalent to that of the other Board members. However, the First Nation Councillors did not have many of the skills required to be effective participants in a mainstream institution. During the time of data collection for this study, the First Nations had appointed more Board members with technical, communication, and negotiation skills, including non-native advisors and one of their Chiefs. While advisors have the skills required to be effective Board members, they have no decision-making authority in the First Nation communities. The Chief, as the highest-level of decision-making authority [redacted] First Nation, is ultimately responsible for approving what the Board [redacted]es. Thus the First Nation Board members have higher or lower levels of authority than the Board members from other parties to the Board. Consideration of these aspects of equality leads to the conclusion that the First Nations are in the process of adapting their institutions to the Board system.

### 5.3 Co-Management and Conflict in the Special Management Area

Conflict was a recurring theme in the interview data and participants identified three major types of conflict within the co-management process: conflict of interest for Board members; conflict between parties to the Board; and conflict between First Nation land uses and logging practices.

Several Board members identified a conflict of interest for government Board members, related to their dual roles as Board members and approvers of forest management plans (see Section 2.3). This problem has been addressed in the new MOU but has not been completely resolved. Some Government Board members will be involved in review of the Board's plans and recommendations to the Minister and may continue to find conflict between this role and their roles as Board members.

Board members also mentioned conflict among parties to the Board and the potential for the co-management process to resolve conflicts before they became disputes:

> *"... we are trying to establish some kind of dialogue with industry and government so that at least our concerns are heard and ... acted on. We hope people will listen ..." (interview #12, lines 34-37)*

> *"... for me ... it reduces the potential of conflict with the Chiefs, so that I have an opportunity to have a constructive working relationship." (interview #21, lines 52-54).*

> *"It's an opportunity to draw First Nations together with the government in a little more open communication. To get us talking. Working together to look at opportunities on a partnership basis, instead of First Nations over there and government over there, banging their heads. (interview #22, lines 16-21).*

Some First Nation participants talked about the potential for conflict over management of the forest to become manifest through social protest:

*"Before we established this Board, we were heading into an area of conflict. I don't think the other communities or the government realized how close they were coming to a major conflict with ... the people in this area." (interview #12, lines 29-32).*

*"...the best for the Nation is ...try and stop the logging trucks and the loggers, the industries that come in and do... everything that's negative to the native people ...It's sad to see, the land is just being cut down for no reason." (interview #113, line 46-52).*

Community members identified a third type of conflict, between First Nation land uses and logging practices in the SMA. Community members gave numerous examples of how logging and other industrial activities had impaired their ability to use the forest:

*"There is no fur. Especially marten and lynx, there is no fur. There used to be a lot of fur. As soon as there is clear-cutting, there's nothing, it's disappeared...It is too late to fix the damage, but they can go to new areas and do it better." (interview #110, lines 22-27).*

*"Careful with my beautiful plant here for what ails me. That's what I'm looking at. That's why I say, a lot of devastation out here, all over. I've seen a lot of it here in Alberta, where it's just completely wiped out some places where some good plants were. ...That root is good for what ails you." (interview #111, lines 344-351).*

*"I have a trapline in this area, wherever a trapline is logged, they come in with big machines and do scarification. If I have a trail in that block, it's destroyed. Scarification is a big issue." (interview #114, lines 55-59).*

*"...everything was cut ... even on these creeks, these lakes, they felled right into the ice, and left the tops, right on the ice. And we use these creeks and these lakes, ...paddle, go around. You can't do that now. Those are blocked off, all these logs. They [the logs] can't go to the river to float away. These creeks are blocked off." (interview #18, lines 38-43).*

Other Community members expressed more general outrage at logging activities in the SMA:

*"I've been wondering why they are cutting down trees, in the mountains, all over. ...I asked why are they cutting trees? Maybe they can't stand to see the trees. I know there was one guy ... who was cutting trees for profit." (interview #17, lines 11-18).*

*"A lot of logging is done using equipment, I don't agree with that. ... I have watched feller-bunchers go through the forest, it made me pretty mad!" (interview #115, lines 77-81).*

Another type of conflict was apparent in the interview data, especially the data from First Nation participants. This last type of conflict is a potential conflict between the objectives of employment in the forest industry and protection of First Nation land uses. In this study, older participants were more supportive of employment objectives, while younger participants were more supportive of

protection objectives. Community members generally agreed that logging in the area should slow down, but some young people said that it should stop altogether. This finding can be partially attributed to the fact that older First Nation members are more likely to have been employed in the forest industry at some point in their careers. A larger sample size would be necessary to investigate the nature and extent of this type of conflict and determine whether this finding applies to the First Nation communities.

### *5.3.1 Consensus Decision-Making*

As discussed in section 3.1.3, conflict management can be an integral part of the process of co-management. In this particular case, interview data suggest that there is a much potential for management of conflict through consensus decision-making on the Board. Board members from all parties identified consensus as critical to their ability to accept the Board's decisions. Important elements in participants' definitions of consensus included: non-confrontational ways of exploring issues; decisions that reflected the influence of all parties; ability of all parties to "live with" decisions; and adequate time to consider issues.

The following excerpts illustrate participants' views of consensus and how consensus processes could force the Board to manage conflict related to forest management in northern Alberta:

> *"Even if it takes a long time, at least, when a decision is made, then we have one or two words in there .... Consensus to me is to say that we argued but that somewhere we met halfway." (interview #12, lines 470-474).*

> *"There was some pretty heated discussions and arguments and debates to arrive at the consensus, but in the end I think everybody*

*walked out of the room, some much happier with the decision we had arrived at than others ...if this Board's going to function, ... it's important for everybody to ... express exactly what they think ... and be able to talk about it and get the other people to listen to it ....when you walk out of that Board meeting ... you'd better all be on side ...you're part of the decision and you're going to live with it and support it. Because the Board can't function any other way." (interview #22, lines 351-369).*

*"... it's unlikely that the Board would reach a decision that's likely to be overturned, either by the Minister or by the Chiefs. So I think it's kind of a self-regulating process to some extent. (interview #23, lines 195-198).*

*"... if you don't get to the table and bring your conflicts to the table, then nobody knows what the issues are. And you spend a lot of time sending paper back and forth instead of having formal discussion on issues and then eventually resolving them ... you're all in the same room and you have to leave when everything's said and done." (interview #11, lines 246-254).*

Some Board members felt that there may be a need to educate non-native Board members about First Nation approaches to consensus:

*"... the white guys lack an understanding of consensus decision-making ... You talk 'til you decide, you don't sit down and vote" (interview #13, lines 30-34).*

*"... consensus ... uses dialogue as the basis for exploring issues. ...as opposed to argument, I mean, you never say something which directly contradicts something which is said by someone else. To confront someone ... is considered poor etiquette" (interview #16, lines 825-831).*

There is clearly a need for cultural exchange among Board members, in order for Board members from different parties to clearly understand each others' definitions of "consensus". If the Board can come to an understanding of what it means by "consensus", there is much hope for this process to assist in management of conflict related to use and management of the boreal forest in northern Alberta.

### 5.4 Definitions of Sustainable Forest Management

Definitions are important to participants in the co-management process in northern Alberta. For example, the definition of "renewable natural resources[19]" in the MOU was important to many participants. A definition of sustainable forest management (SFM) is likely to emerge as part of the co-management process. Sustainability was an important theme in the interview data. Participants discussed many dimensions of sustainability, including economic, social, ecological, and cultural. A sustainable timber supply was seen as important in maintaining the local economy and providing jobs for a growing population. Most Board members recognized First Nation uses of the land and the importance of the forest in sustaining First Nation cultural practices. Challenges identified by Board members included coming to a definition of sustainability that could be supported by all parties, but that was not so broad as to be meaningless.

---

[19] "Renewable natural resources" are defined as "all those forest resources including air, land, water, forest, fish and wildlife, parks and natural areas" (see Appendix A and Section 1.0).

### *5.4.1 Sustainable Timber Supply*

A sustainable timber supply was the key component of sustainability for Industry Board members. Government Board members tended to include both timber supply and other dimensions in their definitions of sustainability:

> *"...sustainable forest management ... means you are sustaining ecological aspects of the forest as well as making sure that there's enough timber to keep the mills running." (#21, lines 217-220).*

### *5.4.2 Cultural Sustainability*

First Nation Board members and Community members were not as concerned with timber supply dimensions of sustainability and focused on other aspects, including environmental protection and the ability of the forest to continue to meet local needs:

> *"I feel no compulsion to supply DMI with a sustainable supply of timber. A sustainable supply of timber is good for stable regional economies and community development." (interview #13, lines 120-123).*

> *"...sustainability is the lynchpin of this agreement ... true sustainability in terms of other forest uses." (interview #16, lines 1013 and 1070-1072).*

> *"...it's our land anyway, ...the government thinks ... it's theirs, but it's not. It's not ours too, it's not...the native peoples' ...It's*

*nobody's ... we're all here to visit. People have to understand that, to respect." (interview #113, lines 216-224).*

*"... let's go take a look in there. What's in there we're going to damage, how can we get away from that and preserve what we can. Every little plant out there is sacred to me. There is every little plant out there that was planted there for people's use." (interview #111, lines 140-144).*

Many Community members mentioned the need to protect areas of forest important to them, their communities, and the First Nations. These areas included: campsites, spiritual sites, travel routes, traplines, and areas where medicinal plants grow. Community members generally agreed that the Board needed to look at different ways of logging, in order to reduce impacts on the environment and First Nations people. Cultural sustainability was a key element in some First Nation participants' definitions of sustainability:

*"... in order for us to continue practicing some of the traditional lifestyles and vocations of the native people, ...[we] need the forest. If we don't have the forest, if all of the forest is going to be cut down, the majority of the time this will be gone" (interview #12, lines 520-524).*

*"... they don't care. They have destroyed the land further south and now they are trying to do the same thing here. We ... like to be in the bush. We're Woodland Cree!" (interview #17, lines 126-130.*

Some participants recognized that there would be challenges for the Board associated with defining sustainability:

> *"I think we're going to have some different understandings as to what we mean by the word "sustainable", just the word itself. The native people, their understandings may be a bit different ..." (interview #12, lines 206-209).*

> *"...we anticipate that there will be a ... reduction in the sustainable yield, but that the number that we ... ultimately arrive at will be truly sustainable." (interview #16, lines 1037-1039).*

This study confirms that coming to a definition of sustainable forest management will indeed be a key challenge for the Board and for all participants in the co-management process in northern Alberta. The definition of SFM in the co-management process is likely to include many of the principles described by Carpenter and Kessler (1999), specifically "ecosystem integrity", "uncertainty", "social issues" and "public participation and accountability" The definition must also incorporate the five indicators identified by Ray (1998) (these indicators are tenure, equity, training, community development and tradition; see Section 3.2.1). The ability of the First Nations to maintain their cultural uses of the forest is likely to be a key test of a successful definition of SFM from the First Nations' perspective.

### *5.4.3 Integrated Resource Management*

A majority of Board members suggested that the co-management process was an important opportunity to work toward integrated resource management (IRM) in the Special Management Area. First Nation participants supported the concept of IRM as reflecting their views of how the forest should be managed. Achieving

integrated resource management is a stated goal of the co-management process (see Appendix A) and the process clearly presents many opportunities for involving a wider range of parties in forest management.

Board members identified the involvement of other parties, particularly the oil and gas industry[20], as essential for dealing with cumulative effects, or the impacts of a variety of land uses and activities on the forest landscape:

> *"The biggest issue with the forest industry, and the oil and gas industry, is cumulative effects on the forest in the MOU area. ... this has been a chronic problem across public lands." (interview #21, lines 149-153).*

Jurisdictional issues were a concern for some Board members. Non-First Nation Board members suggested that the First Nations needed to learn about how government and industry operated:

> *"... First Nations ... need to understand ... these processes ... that government has, and how they [government processes] relate to the way they [First Nations] do things (interview #23, lines 72-74).*

> *"I don't want to do integrated resource planning, I don't have the expertise to do that" (interview #31, lines 88-89).*

Several Community members suggested that the Board process was a good vehicle for the First Nations to learn how to interact with mainstream society. Government and Industry Board members were more likely to mention

[20] The oil & gas industry was not formally involved on the Board until after the completion of this research.

institutional and process barriers to implementing IRM than First Nation Board members. Although the co-management process itself can be seen as an institutional adaptation on the part of mainstream society, it is clear that further institutional adaptations will be required to deal with issues such as IRM and cumulative effects. The co-management process in northern Alberta is an important opportunity to begin addressing these larger issues. However, the Board cannot expect to make major progress on these issues on its own. The Board will require support from other institutions including government and academia.

## 5.5 Representation and Empowerment

While some aspects of representation were considered in the original design of this study, participants showed an unexpected degree of interest in representation issues. There was general agreement among Board members that the First Nations, Government, and the forest and oil and gas industries all had a legitimate interest in management of the forest and should be represented on the Board. A major issue of concern to some Board members was representation of other interests, specifically non-native interests. Adequate representation of these interests was seen as important in establishing and maintaining credibility of the Board process and decisions:

> *" ... credibility in the community, I mean community outside the First Nations, like High Level, La Crete ... First Nations are critical of the allocation [of resources] without their involvement. This [Board] is doing the same thing in a different context, other communities are not involved in decision-making. ... there is a problem with credibility in the wider community. The forest land base is critical to others as well, not just First Nations... (interview #33, lines 33-42).*

Board members raised some interesting questions about the representation of interests on the Board, including whether Government Board members represented their Departments or the Government of Alberta. Other suggestions included having just the First Nations and the Government of Alberta on the Board, with Government Board members representing industry; and having general "industry" representation on the Board, instead of the forest industry, the oil and gas industry, etc. Other aspects of representation issues raised by Board members included: the need for Board members from all parties to get input from their constituents on major decisions; concerns about community timelines for decision-making and their impacts on Board decisions; and the need for accountability of representatives to their constituents.

### *5.5.1 Representation of Interests*

The question of the interests actually represented in this co-management process, and in other co-management processes, is an important one that remains unanswered by this study. The interests represented by Industry Board members (i.e., a timber supply) are readily apparent. The interests represented by the First Nation Board members are less clearly defined and are discussed in the next section. The interests represented by Government Board members are particularly hard to identify. Government Board members seem to be representing their Departments at some times and the Government of Alberta at others. It seems unlikely that Government Board member represent the public in this particular process. None of the participants suggested that Government Board members should or did represent the public interest, and this study found no mechanisms in place for Government Board members to determine the public's interest with respect to forest co-management in northern Alberta. Thus Government Board members cannot be said to be acting as representatives of the public interest, according to the criteria identified in Section 3.3.2.

Board members from all parties reported using existing mechanisms to consult with their "constituents". This situation ensures that the parties do not have to develop new procedures for interacting with the Board, but it also perpetuates the exclusion of some interests (e.g., those of women) from the process. Government and Industry Board members had access to higher-level decision-makers within their organizations. For many matters of concern to the Board, these Board members would need to consult with only a few people. First Nation Board members, on the other hand, generally felt a need to obtain grassroots community approval on some issues of concern to the Board. The First Nation Board members are clearly representing a wider spectrum of interests than the other Board members and therefore have more onerous consultation duties under the current structure of the Board. Consultation between First Nation Board members and Community members is an aspect of empowerment and is discussed below.

### *5.5.2 Empowerment of the First Nations within the Process*

The overall structure of the Board is conducive to empowerment of the First Nations within the process of forest co-management in northern Alberta (see Section 5.2.5). However, the First Nations are currently at a disadvantage in terms of accessing the human resources required to support active involvement and are not participating in the process to the extent that they could. To achieve empowerment within the process, the First Nations will need to pay a great deal more attention to their representation on the Board.

This discussion of representation issues in the First Nations will begin with a consideration of the interests represented by First Nation Board members. According to the terms of the MOU, two voting seats on the Board are for the First Nation Economic Development Corporations (see Appendix A). Five additional seats are for the First Nations. Board members are required to appoint an Alternate, and Alternates are invited to attend Board Meetings. Thus the First

Nations should be appointing a total of 14 representatives to the Board. During the period of data collection for this study, the First Nations did not send more than four Board members to a meeting. None of the First Nation Board Members was identified as representing the Economic Development Corporations. It is therefore assumed that they represent the general interests of the First Nation communities. Some First Nation Board members spoke about the difficulty of representing all interests within the First Nation communities. Some Community members suggested that the interests of some segments of the community were left out of existing decision-making structures in the First Nations:

> *"They should share with all the people, instead of picking elders and men. They think all the women just like to argue. Talk to the women and young people, they have good ideas too." (interview #17, lines 108-112).*

It is clear from the community interviews that Community members have not had many opportunities to communicate their interests to the First Nation Board members. All of the Community members participating in this study were interested in the Board and all of them knew virtually nothing about it. Many participants reported being dissatisfied with existing processes of information sharing within the First Nations. Community members made many interesting suggestions for ways that Board members could consult with the wider public in the First Nation communities. The three most common suggestions were for written materials, face-to-face communication, and community meetings:

- **Written Materials:** Most Community members said they would like to receive written information about the Board. Suggestions included newsletters, brochures, handouts, and information letters. Some suggested articles in *Kayas Nooze* or other local newspapers. Others thought information

should be distributed through the schools, especially to the younger children who would give the information to their parents.

- **Face-to-Face Communication.** Many Community members spoke of the need for face-to-face communication or one-on-one discussion about forest management issues. They suggested that staff should visit knowledgeable people in the communities, or visit people individually, in the communities or out on the land. The importance of face-to-face communication was also identified by some First Nation Board members.
- **Community Meetings:** Several Community members suggested that community meetings should be held, but more said that turnout was poor at most meetings. If community meetings were held, Community members thought they should deal only with forest management issues. Some suggested that meetings should be advertised with posters.

One of the most creative suggestions by Community members (interview #11) was similar to a random sample survey approach: the names of each household could be put into a hat, and a couple of names drawn out each week. Those households could then be visited to talk about forest management. Other suggestions for consultation with First Nation people included: using the radio to announce Board meetings and decisions, having Board meetings in public, and offering tobacco to people being consulted.

In general, Community members showed a great deal of interest in obtaining more information on the Board's work and in becoming involved in the Board process. This bodes well for meaningful community involvement in the co-management process, but consulting individually with First Nation community members would put impossible demands on the time commitments of First Nation Board members. Thus the First Nations need to consider mechanisms to assist their Board members in consulting with their communities. Data from the

community interviews suggest that empowerment at the community level could be both a necessary prerequisite for and a result of a successful co-management process. Sharing was a common theme in the community interviews and several Community members suggested that the First Nation people had to work together to support the Board in its work:

> *"And if we work together ...our work seems light. ...It seems like we are carrying a light load ...if we all work together. But if we work individually, sometimes our load is very heavy..." (interview #112, lines 42-46).*

> *"...there's no way that the people can work together if the Board over here is weak ...The Board has to be strong as a group, as a team, as one. And, for the people to support them they need to be strong as one, so the people could ... work as a whole, that's the only way to work." (interview #113, lines 144-149).*

> *"The biggest thing ...is to have political support, from the community and the leadership. This support has to be visible to the person doing it." (interview #115, lines 51-54).*

The First Nations' representation on the Board was an issue to some Community members. Several suggested that the First Nation representatives on the Board should be members of the First Nations:

> *"...the leadership need the kind of support that's loyal to Little Red River and they can find that in their memberships, rather than hiring somebody from outside ..." (interview #11, lines 151-154).*

*"I think they should have First Nation members on the Board, and not rely on advisors, white people, to come in there and do their work for them. 'Cause ...are they going to keep these guys on, they'll never get rid of them, they're going to be there all the time because they rely on them too much." (interview #14, lines 299-304).*

Community members also recognized barriers to First Nation participation on the Board, including a lack of technical forestry skills, and lack of expertise in conducting meetings and negotiations. These same barriers were also identified by some Board members, but non-participant observation suggests that the First Nations may be underestimating their availability of human resources. During the field work component of this study, I met individuals with some of the skills required to be effective Board members in all of the communities I visited. I also noticed (based on document review) that the First Nations appear to place some emphasis on leadership as a criterion for their Board members. The results of this study suggest that there are numerous criteria for membership on the Board, but leadership is not one of them. The First Nations could therefore consider broadening their criteria for membership on the Board. This might lead to the appointment of more First Nation members to the Board. This, combined with the appointment of a full complement of Board members, would do much to increase the First Nation presence on the Board and thus their share of power in the co-management process.

# 6.0 NURTURING FOREST CO-MANAGEMENT IN NORTHERN ALBERTA

Based on the foregoing examination of sociological aspects of the process, one of my conclusions is that forest co-management in northern Alberta is like a small spruce tree. The parties involved in the process have worked together to prepare the ground and plant a seedling. They have traveled a short distance down a long road and are exploring new institutional territory as they go. Continued commitment from all parties will be necessary to nurture the seedling and continue the journey toward a shared vision of management of the boreal forest in northern Alberta.

This Section summarizes the findings and conclusions of this study and describes theoretical and applied contributions. The thesis concludes with a discussion of some further research questions that could elaborate upon or clarify some of the issues examined in this study.

## 6.1 Summary

A new forest management institution involving First Nations, Government, and Industry has recently been established in northern Alberta and this project capitalized on an opportunity to observe the initial stages of development of a co-management process. This study focused on structure and process variables, and the ability of the institution and the overall process to achieve its stated goals. Semi-structured interviews were conducted with members of the Cooperative Management Planning Board, with support staff from all parties to the Board, and with Community members from the Little Red River Cree Nation and Tallcree First Nation. Initial questions were based on factors thought to be important in the success of co-operative natural resource management institutions, as identified in

the co-management and natural resource sociology literature. Other methods of data collection for this project included non-participant observation, informal interviews, and review of documents produced by the Board and the parties to the Board.

Based on a review of existing typologies for describing co-management, the northern Alberta process is considered to be a form of "strategic" co-management, implemented by the First Nations and the Government of Alberta as an interim measure pending resolution of larger Aboriginal rights issues. Aboriginal rights are an underlying motivating factor for both parties and both parties share the objectives of economic development and conflict avoidance. The Government's main goal is consultation while retaining full jurisdictional authority. The First Nations' main goal is influence over lands considered to be traditional territories.

Based on analysis of interview data with 13 Board members / support staff and 10 Community members, factors that the literature identifies as important to the success of co-management are also recognized as important in this process. These factors include: trust, common goals, human resources, and involvement of third parties. The parties on the Board need to build trust and agree on common goals for the process. Although all parties appear to have access to human resources to support the process during its initial stages, this study identifies a large number of suggested qualifications for Board members. All parties to the Board may have difficulty in meeting the human resource requirements associated with the co-management process. The co-management process presents important opportunities to involve third parties in forest management and study participants identified third-party involvement as critical to success of this process. Both third party involvement and institutional adaptation will be required to achieve some of the broader objectives of the co-management process, including those related to integrated management of natural resources.

Other issues important to participants in the co-management process include conflict resolution, sustainable forest management, and representation. The co-management process itself can be considered to be a form of cross-cultural conflict management and the process has much potential to manage conflict associated with use and management of the boreal forest in northern Alberta. Although the parties involved in the process appear to have a sincere commitment to consensus-based decision-making procedures, there is a need for them to understand each others' views of consensus and agree on procedures acceptable to all participants.

The Board will need to construct a definition of sustainable forest management (SFM), incorporating the dimensions of sustainability important to the parties represented on the Board. A sustainable timber supply is a key component of SFM in the study area, especially for industry and government Board members. Ecological and cultural factors appear to be more important to First Nation Board members. The definition of SFM will likely include elements of integrated resource management, which is a stated goal of the co-management process. This study identifies the definition of SFM as a key challenge for the co-management process. The ability of the boreal forest to continue to support cultural practices is likely to be a key component of sustainability for the First Nations involved in the process.

A number of representation issues were important to study participants, including representation of interests on the Board. The question of representation of interests in co-management is one that has received much attention in the co-management literature. The co-management process in northern Alberta includes various levels of representation. The interests of industry are clearly and directly represented on the Board. The interests of Government are more difficult to

determine and it is doubtful whether Government represents the public interest on the Board. The interests of the First Nations are currently underrepresented on the Board because the First Nations have yet to appoint a full complement of Board Members. The interests of other parties are recognized within the co-management process but not on the Board. Adequate representation of third-party interests is likely to play a critical role in successful implementation of the co-management process. The First Nations need to devote more attention to their representation on the Board, because effective representation will be essential for them to achieve more equality with the other parties on the Board and work toward empowerment within the process of forest co-management in northern Alberta.

## 6.2 Theoretical Contributions

This study contributes to the development of co-management theory by confirming "strategic co-management" as a useful categorization of the process in Canada. This research highlights the difficulties involved in relying on authority transfer as the main criterion for evaluation of co-management and introduces alternative evaluative criteria based on the "crisis" and "comprehensive" types of co-management.

This study confirms the findings of previous researchers regarding factors that influence the success of co-management, including trust, common goals, human resources, and third party involvement. The parties involved in the process in northern Alberta need to build trust, and have not yet completed the basic step of agreeing on common goals. The human resource requirements associated with co-management are onerous for all of the parties on the Board. These findings point to the need for more attention to human resource and organizational development in cooperative natural resource management institutions. This study also found that third party involvement was critical, not only for accessing the human resources required to implement co-management, but also to allow the new

institution to achieve many of its broader goals. Achievement of goals related to integrated resource management is a major challenge for the Board, because of the many barriers to addressing this issue within mainstream institutions.

Although equality of partners was not of prime concern to study participants, this factor was found to be important in the northern Alberta co-management process. The First Nations appear to be equal partners on the co-management Board, but a closer examination of human resources requirements suggests that the First Nations are currently at a structural disadvantage in terms of access to the skills and knowledge necessary to be effective participants. This situation leads to a consideration of power relationships within the co-management process. This study shows how the co-management process can be considered as a move toward a pluralist power model. Elements of the elitist and hegemonic power systems are also present within the co-management process.

This research shows that co-management is a form of alternative dispute resolution, specifically a mechanism for cross-cultural conflict management. Study results identify great potential for consensus decision-making processes to manage conflicts over use and management of the boreal forest in northern Alberta. That the parties involved in co-management will need to develop a common understanding of consensus procedures reinforces the importance of common goals in the overall success of the process.

This study confirms the importance of definitions to participants in cooperative natural resource management and illustrates some of the difficulties involved in arriving at them. The results indicate that in northern Alberta, the definition of sustainable forest management (SFM) is likely to contain some principles in common with other mainstream definitions. However, the northern Alberta definition is also likely to include Aboriginal criteria for SFM, specifically

cultural sustainability. This research identifies cultural sustainability criteria as key to success (of definitions and the process) for the First Nations involved.

The results of this project show that co-management participants identify clear links between the forest co-management process and integrated management of natural resources in the study area. This finding reinforces the importance of third-party involvement in the success of cooperative natural resource management as well as the need for institutional adaptation by all parties on the Board. Third-party involvement is also related to representation issues, an unexpected concern of many study participants. This study identifies the importance of determining the interests actually represented in cooperative natural resource management institutions, as well as some of the difficulties involved in determining those interests.

Effective representation of First Nation interests was identified as essential if the First Nations are to overcome current structural disadvantages and achieve equality with the other parties on the Board. This research found evidence of the potential for community empowerment, including an interested First Nation "public" and numerous individuals with the skills required to be effective Board members. These results highlight the importance of community representation in cooperative management institutions and in achievement of the social justice objectives associated with co-management.

In addition to theoretical contributions, this project demonstrates the usefulness of the semi-structured interview methodology in conducting some types of social science research in First Nation communities. The methodology was successful in obtaining the views of all parties on the Board as well as First Nation Community members. Interviews were conducted with First Nation community members of various ages and both genders, and there were few problems related to the cross-

cultural nature of the research. The participation of First Nation community members was probably a critical factor in the success of the interview methodology in the communities. Interviews with community members added a number of dimensions to this study, including a more in-depth understanding of Aboriginal criteria for sustainable forest management and a better assessment of the potential for community empowerment within the co-management process.

Another objective of this project was to identify opportunities and challenges associated with the implementation of forest co-management. Advice was developed for the parties involved in the co-management process, in an attempt to assist them in supporting the process to achieve its potential. The applied advice provided to the Board and to the First Nations is summarized in Sections 6.3 and 6.4, respectively.

### 6.3 Advice to the Board

A report on this project was presented to the Cooperative Management Planning Board at their meeting in High Level, Alberta, on June 5, 2000 (see Treseder & Krogman 2000a). The advice contained in our report to the Board focused on organizational development, including procedures for involving third parties. Our advice included a recommendation that the Board initially concentrate on Board development, including discussion of common goals, definitions, and consensus procedures. Cultural exchange activities, such as visits to logging activities in the SMA, tours of the local forest products mills, and workshops, were suggested as means of allowing Board members to get to know each other, build trust, and understand each others' values and perspectives.

We also advised the Board to develop procedures to involve other parties, and to consider developing mechanisms to involve women. The Board could start with criteria to distinguish stakeholders based on those developed by Borrini-

Feyerabend (2000). We suggested that all parties to the Board assess the level of staff commitment required to support the co-management process. We thought the Board should consider having dedicated staff in the future when its level of activity increases, in contrast to having staff support the Board in addition to performing their regular duties. During the interviews, several Board members suggested that a facilitator would be useful in helping with difficult issues, and we strongly recommended that the Board take this advice. We also suggested that facilitators be independent of the parties to the Board.

We informed the Board of the potential challenges associated with defining sustainable forest management and the need to address conflicts between logging and First Nation uses of the forest. We suggested that the Board undertake a pilot project to build trust, learn about each other's viewpoints, and demonstrate the potential to achieve sustainable forest management in the Special Management Area. A suggested pilot project was to undertake logging in an area of some importance to the First Nations, to investigate ways that logging could be done to reduce impacts on First Nation land uses and forest values.

We recognized the commitment of the parties to the co-management process and the principle of adaptive management. We suggested that this study could serve as a baseline for future evaluation of the process, a necessary step in the implementation of adaptive management principles. We recommended another evaluation of the Board in about three years, along with criteria that the Board could use in future evaluations.

### 6.4 Advice to the First Nations

A report on this project was presented to leaders and members of the Little Red River Cree Nation at a community meeting in Fox Lake, Alberta on June 26, 2000 (see Treseder & Krogman 2000b). One of the conclusions of that report was that

the co-management process was indeed an opportunity for the First Nations to influence the management of natural resources in their traditional territories. Thus, the answer to the second of our major research questions (see Section 1.1) was "yes": this process is an appropriate vehicle for the First Nations to influence resource management in their traditional territories.

Based on the number of seats that the First Nations hold on the Board, the First Nations' share of timber rights (tenure), and interview data from this study, the First Nations have the ability to have a strong influence on the mandate and conduct of the Board process. However, the First Nations need to address their representation on the Board, in order to achieve more active participation and improve their ability to influence the process. All of our recommendations to the First Nations dealt with some aspect of their representation on the Board.

We recommended that the First Nations appoint a full complement of seven Board members and seven Alternates to the Board, including designated representatives of their Economic Development Corporations. We recognized the First Nation Chiefs' involvement as essential to the initial establishment of the co-management process. Over the long term, however, we advised the First Nations to avoid appointing their highest levels of decision-makers to the Board. This will give the First Nation representatives more equivalent authority with the other Board members.

We identified some of the qualifications that Board members need to be effective participants in the co-management process, and suggested that the First Nations take a group approach to finding individuals with the necessary skills. Appointing a group of people, who together have the necessary skills and experience to be effective Board members, would be one way of increasing the number of First Nations people on the Board. We also suggested an Apprenticeship program,

whereby young people could learn about the co-management process by serving as Alternates to Board members. An Apprenticeship program would increase community awareness of the co-management process and prepare a group of young people to serve as future Board members.

We advised the First Nations to consider the different interests within their communities and the representation of these interests on the Board. We reported the suggestions made by study participants to improve communication between First Nation Board members and community members. We recommended that the First Nations hire a young person ("communications person") to assist their Board members in implementing some of the community's suggestions. We also told the First Nations that there would likely be further community employment associated with implementation of the co-management process.

### 6.5 Recommendations for Future Research

Recommendations for future research into co-management arising from this project include a need for further development of theoretical models of co-management processes, especially models that are not based exclusively on the concept of authority transfer. More critical evaluation of existing co-management arrangements is needed to determine their actual ability to address diverse management objectives such as timber harvesting and sustainability of First Nation land uses.

Future assessment of co-management could include investigation of relationships between co-management and conflict and between co-management and community empowerment. There is a need for more research to determine whether co-management is an effective mechanism for managing conflict. Different forms of co-management could be compared to determine their success in managing conflict in varying contexts. There is also a need for more research to

assess the ability of co-management to contribute to community empowerment. Community empowerment is an assumed benefit of co-management that requires more data to substantiate.

Although this study identifies effective representation as a critical factor in achieving community empowerment, larger questions of representation have not been adequately addressed, either in the co-management literature or by this study. Representation issues in co-management deserve more attention by both academics and practitioners. Suggested areas for future research include: identification of the interests actually represented in co-management processes; clarification of the interests represented by government participants in co-management; and the relationship between co-management institutions and larger societal processes for obtaining consent on resource management decisions.

This project identified numerous conflicts between logging practices and First Nation uses of the boreal forest and more research is needed into the nature and extent of these conflicts. Research is also needed into alternative techniques for the practice of forestry in the boreal forest, in order to determine practical methods for reducing impacts on First Nations people.

This project is an example of successful co-operative research with First Nations and more research of this type should be supported. Canada's Aboriginal people are becoming more involved in natural resource management and their involvement will result in their having more influence over the research agenda and more direct participation in academic studies. Research with First Nations and other Aboriginal communities will improve our understanding of Aboriginal issues in resource management and of the adjustments required by all parties to facilitate effective partnerships in the management of our natural resources.

## 7.0 LITERATURE CITED


Agrawal, Arun. 1995. Dismantling the Divide Between Indigenous and Scientific Knowledge. *Development and Change*. 26: 413-439.

Alberta Aboriginal Affairs. 1996. Understanding on First Nations/ Alberta Relations. April 1996.

Alberta Environment. 2000. Sustained Yield in Alberta – Status of Alberta's Timber Supply. (www.gov.ab.ca/env/forests/fmd/timber/Sustained.html). August 1, 2000.

Alberta Environment. 1998. Interim Forest Management Planning Manual Guidelines to Plan Development. Version: April, 1998. Land and Forest Service, Alberta Environment. (www.gov.ab.ca/env/forests/fmd/planning/planning1.html). July 27, 1999.

Alberta Environmental Protection (AEP). 1998. The Alberta Forest Legacy – Implementation Framework for Sustainable Forest Management. (www.gov.ab.ca./env/forests ).

AEP. 1996. Environmental Protection Cooperative Management Framework. Approved November 1996. 2 pages.

AEP. 1994. *ALBERTA Timber Harvest Planning and Operating Ground Rules*. Land and Forest Service, Alberta Environmental Protection. 69 pages.

Alberta International and Intergovernmental Relations (IIR). 2000. Understanding on First Nations/Alberta Relations. (www.iaa.gov.ab.ca/iaa/html/relatns.html). February 8, 2000.

Arnold, J.E.M. 1998. *Managing forests as common property*. Rome: Food & Agriculture Organization of the United Nations. FAO Forestry Paper 136.

Askee Development Corporation and High Level Forest Products Ltd. 1996. Wood Supply Agreement. November 1, 1996. 22 pages.

Babbie, Earl. 1999. *The Basics of Social Research*. Belmont, CA: Wadsworth Publishing Company. 473 pages.

Babbie, Earl. 1986. *The Practice of Social Research*. 4th Edition. Belmont, CA: Wadsworth Publishing Company.

Beckley, Thomas M. 1998. Moving toward consensus-based forest management: A comparison of industrial, co-managed, community and small private forests in Canada. *Forestry Chronicle*. 74 (5): 736-744.

Beckley, Thomas M. 1996. Pluralism by Default: Community Power in a Paper Mill Town. *Forest Science*. 42 (1): 35-45.

Beckley, T.M. and B.H. Hirsch. 1997. *Subsistence and Non-Industrial Forest Use in the Lower Liard Valley*. Edmonton: Canadian Forest Service, Northern Forestry Centre, Information Report NOR-X-352.

Beckley, T.M. and D. Korber. 1996. *Clearcuts, conflict and co-management: experiments in consensus forest management in Northwest Saskatchewan*. Edmonton: Canadian Forest Service, Northern Forestry Centre, Information Report NOR-X-349.

Beckley, T.M. and D. Korber. 1995. Sociology's potential to improve forest management and inform forest policy. *Forestry Chronicle*. 71 (6): 712-719.

Benedickson, Jamie. 1992. Co-Management Issues in the Forest Wilderness: A Stewardship Council for Temagami. pp. 256-275 in: Monique Ross and J. Owen Saunders (eds.). *Growing Demands on a Shrinking Heritage: Managing Resource-Use Conflicts*. Essays from the Fifth Institute Conference on Natural Resources Law. Calgary: Canadian Institute of Resources Law.

Berg, Bruce L. 1998. *Qualitative Research Methods for the Social Sciences*. Third Edition. Boston: Allyn and Bacon. 290 pages.

Berkes, Fikret. 1997. New and Not-So-New Directions in the Use of the Commons: Co-Management. *Common Property Resource Digest*. Volume 42, pages 5-7.

Berkes, Fikret. 1994. Co-management: Bridging the Two Solitudes. *Northern Perspectives*. 22 (2-3): 18-20.

Berkes, Fikret. 1989. Co-Management and the James Bay Agreement. Chapter 11 in: Evelyn Pinkerton (ed.). *Co-operative Management of Local Fisheries. New Directions for Improved Management and Community Development*. Vancouver: University of British Columbia Press.

Berkes, F. P.J. George, R.J. Preston, A. Hughes, J. Turner, and B.D. Cummins. 1994. Wildlife harvesting and sustainable regional Native economy in the Hudson and James Bay Lowland, Ontario. *Arctic*. 47: 350-360.

Berkes, Fikret, Peter George and Richard J. Preston. 1991. Co-management. The Evolution in Theory and Practice of the Joint Administration of Living Resources. *Alternatives*. 18 (2): 12-18.

Berkes, Mina and Fikret Berkes. 1999. Subsistence hunting of wildlife in the Canadian north. Chapter 2, pp. 21-32 in: Treseder, L. (ed.). *Northern Eden. Community-based wildlife management in Canada.* Edmonton: Canadian Circumpolar Institute, Occasional Publication Number 46.

Bickman, Leonard and Debra J. Rog. (eds.). 1998. *Handbook of Applied Social Research Methods*. Thousand Oaks: SAGE Publications. 580 pages.

Boonchalaski, Wathinee. 1989. Reliability and Validity in Qualitative Studies. Chapter 3 in: Bencha Yoddumnern-Attig, George A. Attig and Wathinee Boonchalaski (eds.). *A Field Manual on Selected Qualitative Research Methods*. Thailand: Mahidol University Institute for Population and Social Research, Publication No. 127. 110 pages.

Booth, D.L., D.W.K. Boulter, D.J. Neave, A.A. Rotherham and D.A. Welsh. 1993. Natural forest landscape management: A strategy for Canada. *Forestry Chronicle*. 69 (2): 141-145.

Borrini-Feyerabend, Grazia. 2000. *Collaborative Management of Protected Areas: Tailoring the Approach to the Context*. Social Policy Group, IUCN (World Conservation Union), Switzerland. (www.iucn.org/themes/spg/Tailor/Tailor.html). 42 pages.

Boyce, Stephen G. 1982. Biological Consequences of Forest Regulation. pp 29-35 in: D.C. LeMaster, D.M. Baumgartner and D. Adams (eds.). *Sustained Yield: Proceedings of a Symposium Held April 27 and 28, 1982*. Pullman, WA: Washington State University.

Brewer, John and A. Hunter. 1989. *Multimethod Research. A Synthesis of Styles*. Newbury Park: SAGE Publications Inc.

Brody, Hugh. 1981. *Maps and Dream. Indians and the British Columbia Frontier.* Vancouver: Douglas & McIntyre.

Brosius, P.J., A.L. Tsing and C. Zerner. 1998. Representing Communities: Histories and Politics of Community-Based Natural Resource Management. *Society and Natural Resources*. 11 (2): 157-168.

Bryman, Alan. 1988. *Quality and Quantity in Social Research*. London: Unwin Hyman.

Burgess, Robert G. 1984. *In the Field. An Introduction to Field Research*. London: George Allen Unwin Ltd. Contemporary Social Research Series No. 8.

Canadian Council of Forest Ministers (CCFM). 1996. *Criteria and Indicators of Sustainable Forest Management in Canada*. Technical Report 1997. Ottawa: CCFM.

Canadian Forest Service (CFS). 1998a. Canada Forest Accord. Ottawa, May 1, 1998. (www. nrcan. gc.ca/cfs/nfs/strateg/accord_e.html).

CFS. 1998b. National Forest Strategy (1988-2003). Ottawa, June 27, 1998. (www. nrcan. gc.ca/cfs/nfs/strateg/1–9e.html).

Caribou Mountains Special Places Local Committee. 2000. Information Notice placed in *The Echo*, June 21, 2000. High Level, Alberta.

Carpenter, Andrew M. and Winnifred B. Kessler. 1999. FOREST*CARE*: Evaluating progress toward sustainable forest management in Alberta. *Forestry Chronicle*. 75 (5): 811- 820.

Carrow, Rod. 1994. Integrated Resource Management in Canada — A Case Study of Unrealized Potential. *Forestry Chronicle*. 70 (1): 19-21.

Chambers, Fiona. 2000. Workshop Proceedings. From Co-Management to Co-Jurisdiction of Forest Resources: A Practitioners' Workshop. Calgary, October 28-30, 1999. Organized by Michael P. Robinson & Monique M. Ross with funding from the Sustainable Forest Management Network.

Chambers, Fiona G. 1999. Co-Management of Forest Resources in the NorSask Forest Management License Area, Saskatchewan: A Case Study. Master's Degree Project, Faculty of Environmental Design, University of Calgary. 156 pages plus appendices.

Christian, Thomas F. Larry E. Ray, Prudence B. Kestner and Megan Sylvester (eds.). 1989. *Expanding Horizons: Theory and Research in Dispute Resolution.* Conference Proceedings. American Bar Association, Dispute Resolution Papers Series No. 6. August, 1989. 235 pages.

Clark, Mary E. 1994. Integrating Human Needs into Our Vision of Sustainability. *Futures.* 26 (2): 180-184.

Daishowa-Marubeni International Ltd. (DMI). 1999a. *Your Forest.* Volume 3, March, 1999.

DMI. 1999b. *Woodlands Annual Report.* 1998/99 Timber Year. Daishowa-Marubeni International Ltd., Peace River.

DMI. 1999c. General Development Plan 1999-2004. DMI High Level Lumber Division. Submitted June 7, 1999.

Darling, Craig R. (ed.). 1998. *Thinking Strategically. Developing Systems to Resolve Conflict.* Victoria: British Columbia Ministry of Attorney General, Dispute Resolution Series. 66 pages plus Appendices.

Elias, P.D. 1989. Aboriginal rights and litigation: history and future of court decisions in Canada. *Polar Record.* 25 (152): 1-8.

Encyclopædia Britannica. 1976. MICROPÆDIA Volume III. Ready Reference and Index. Chicago: Encyclopædia Britannica Inc.

Folberg, Jay and Alison Taylor. 1984. *Mediation. A Comprehensive Guide to Resolving Conflicts Without Litigation.* San Francisco: Jossey-Bass Publishers. 392 pages.

Forestry Chronicle. 1998. Alberta MOUs Bring First Nations into Consultation Process. Reprinted from *The Edge,* Alberta's Forest Industry Magazine. *Forestry Chronicle.* 74 (3): 305.

Fowler, Floyd J. Jr. 1993. *Survey Research Methods.* Second Edition. Newbury Park: SAGE Publications. Applied Social Research Methods Series Volume 1. 156 pages.

Friedmann, John. 1992. *Empowerment. The Politics of Alternative Development.* Cambridge, MA: Blackwell Publishers.

Gibson, Ginger, Eric Higgs and Steve E. Hrudey. 1998. Sour Gas, Bitter Relations. *Alternatives*. 24 (2): 26-31.

Gilmore, Daniel W. 1997. Ecosystem management — A needs driven, resource-use philosophy. *Forestry Chronicle*. 73 (5): 560-563.

Glaser, Barney and Anselm Strauss. 1967. *The Discovery of Grounded Theory. Strategies for Qualitative Research.* Chicago: Aldine Publishing Company. 271 pages.

Government of Alberta. 1997. New Agreement Announced for Northern Alberta OSB Facility. Government of Alberta New Release. August 28, 1997.

Grumbine, R. Edward. 1994. What Is Ecosystem Management? *Conservation Biology*. 8 (1): 27-38.

Hamilton, A.C. 1995. *Canada and Aboriginal Peoples: A New Partnership*. Report of Hon. A.C. Hamilton, Fact Finder for Minister of Indian Affairs and Northern Development. Ottawa: Public Works and Government Services Canada. 124 pages.

Honda-McNeil, Jamie. 2000. Cooperative Management in Alberta. An Applied Approach to Resource Management and Consultation with First Nations. MSc. Thesis, Department of Renewable Resources, University of Alberta.

House, R. David. 1994. Aboriginal claims and the forestry industry: Claims processes and recent development in the courts. *Forestry Chronicle*. 74 (3): 334-342.

Improvement District #23. 1993. (approx.). *Improvement District #23*. Brochure prepared in co-operation with Alberta Tourism. 12 pages.

Indian Claims Commission. 1975. *Indian claims in Canada: an introductory essay and selected list of library holdings.* Ottawa: Information Canada.

Jaggi, Monika. 1997. Current Developments in Aboriginal Forestry: Provincial Forest Policy and Aboriginal Participation in Forestry in Ontario, Canada. *International Journal of Ecoforestry*. 13 (1): 13-20.

Judd, Annika. 1997. *"Weyiman Waskahikun Wekohkewin" Fort Vermilion, A Special Gathering Place*. Facts from the Lean-To Lynx, Fort Vermilion Heritage Centre. August, 1997. 2 pages.

Kelly, Robert A. and Donald K. Alper. 1995. *Transforming British Columbia's War in the Woods. An Assessment of the Vancouver Island Regional Negotiation Process of the Commission on Resources and Environment.* Victoria: University of Victoria Institute for Dispute Resolution. 36 pages.

KPMG. 1998. *Preparing for a Healthier Nation.* Health Needs Assessment prepared for the Little Red River Cree Nation by KPMG, Edmonton. Draft – September 4, 1998.

La Crete Chamber of Commerce. 1999. *Welcome to La Crete. Alberta's Last Frontier. Alberta's Most Northern Agricultural Community.* Brochure by La Crete Chamber of Commerce and Alberta Tourism.

LeBaron-Duryea, Michelle. 1992. *Conflict and Culture: A Literature Review and Bibliography.* Victoria: University of Victoria Institute for Dispute Resolution. 117 pages.

Lee, Robert G., Donald R. Field and W.R. Burch Jr. (eds.). 1990 *Community & Forestry. Continuities in the Sociology of Natural Resources.* Boulder, Colorado: Westview Press.

Leonard, David and Beverly Whalen (eds.). 1998. *On the NORTH Trail. The TREATY 8 Diary of O.C. Edwards.* Historical Society of Alberta. 122 pages.

Little Red River Cree Nation. 1998. *Discussion Paper: Cooperative Management as a Means to Re-assert Decision-Making over Lands & Resources / A Progress Report.* Edmonton: International Indigenous Research Institution, Building on Cultural Traditions, Panel Discussion on Self-Determination, May 26, 1998. 9 pages.

Little Red River Cree Nation. 1997. Cooperative Management Synopsis. 23 pages.

Little Red River Cree Nation and Alberta. 1996. Letter of Intent. Cooperative Forest Management and Wood Supply Agreements with Little Red River Cree Nation ('LRRCN') and Tallcree First Nation ('TCFN'). September 5, 1996.

Little Red River Cree Nation, Tallcree First Nation and Government of Alberta. 1999. Memorandum of Understanding. September 1, 1999.

Little Red River Cree Nation, Tallcree First Nation and Government of Alberta. 1995. Memorandum of Understanding. May 26, 1995.

Little Red River Cree Nation, Tallcree First Nation, Wood Buffalo National Park, Alberta Environmental Protection, Daishowa Marubeni International, Ltd., University of Alberta and Sustainable Forest Management Network of Centres of Excellence. 1997. *Proposal For The Caribou-Lower Peace Aboriginal Model Forest*. 101 pages plus Appendices.

Little Red River Cree Nation and University of Ottawa Institute of the Environment. 2000. Health of Adult Males in the Little Red River Cree Nation. 22 pages.

Luckert, Martin K. 1997. Towards a tenure policy framework for sustainable forest management in Canada. *Forestry Chronicle*. 73 (2): 211- 215.

Lukes, Steven. 1976. *Power: A Radical View*. London: The MacMillan Press Ltd. 64 pages.

MacLeod, J.R. 1989. Strategies and Possibilities for Indian Leadership in Co-Management Initiatives in British Columbia. Chapter 15 in: Evelyn Pinkerton (ed.). *Co-operative Management of Local Fisheries. New Directions for Improved Management and Community Development*. Vancouver: University of British Columbia Press.

Makowecki, Ray. 1993. *Treaty Indian Hunting and Fishing in Alberta*. Edmonton: Alberta Environmental Protection. Background Paper. Three Volumes.

Mair, Charles. 1999. *Through the Mackenzie Basin. An Account of the Signing of Treaty No. 8 and the Scrip Commission, 1899*. Edmonton: University of Alberta Press and Edmonton & District Historical Society. 194 pages.

Maxwell, Joseph A. 1996. *Qualitative Research Design. An Interactive Approach*. Thousand Oaks: Sage Publications Inc.

McCay, B.J. and J.M. Acheson (eds.). 1987. *The Question of the Commons: The Culture and Ecology of Communal Resources*. Tuscon: University of Arizona Press.

M'Gonigle, R. Michael. 1997. Behind the Green Curtain. *Alternatives*. 23 (4): 16-21.

Mighty Peace Tourist Association. 1999. *Mighty Peace Country 1999 Travel Guide.* Peace River: Mighty Peace Tourist Association. 46 pages.

Nadeau, S., B. Shindler and C. Kakoyannis. 1999. Forest Communities: New frameworks for assessing sustainability. *Forestry Chronicle.* 75 (5): 747-754.

National Aboriginal Forestry Association (NAFA). 1995a. *An Aboriginal Criterion for Sustainable Forest Management.* NAFA Position Paper. 8 pages plus appendices.

NAFA. 1995b. *Aboriginal Participation in Forest Management: Not Just Another Stakeholder.* Ottawa, NAFA Position Paper. 13 pages.

Neuman, W. Laurence. 1997. *Social Research Methods. Qualitative and Quantitative Approaches.* 3rd Edition. Needham Heights, MA: Allyn & Bacon. 560 pages.

Neuman, W. Laurence. 1994. *Social Research Methods Qualitative and Quantitative Approaches.* 2nd Edition. Needham Heights, Mass: Allyn & Bacon.

Niezen, R. 1993. Power and dignity: The social consequences of hydro-electric development for the James Bay Cree. *Canadian Review of Sociology and Anthropology.* 30 (4): 510-529.

Notzke, Claudia. 1995. Aboriginal Peoples and Natural Resources: Co-management, the Way of the Future? *National Geographic Research & Exploration.* 9 (4): 395-397.

Patterson, Michael E. and Daniel R. Williams. 1998. Paradigms and Problems: The Practice of Social Science in Natural Resource Management. *Society and Natural Resources.* 11 (3): 279-285.

Peace Country. 1999. *Peace Country Alberta.* Supplement to Trade & Commerce Magazine, Summer, 1999. 16 pages.

Pinkerton, Evelyn. 1992. Translating Legal Rights into Management Practice: Overcoming Barriers to the Exercise of Co-Management. *Human Organization.* 51 (4): 330-341.

Pinkerton, Evelyn. 1989. Introduction: Attaining Better Fisheries Management through Co-Management—Prospects, Problems, and Propositions. Chapter 1 in: Evelyn Pinkerton (ed.). *Co-operative Management of Local Fisheries. New Directions for Improved Management and Community Development*. Vancouver: University of British Columbia Press.

Pitkin, Hanna Fenichel. 1967. *The Concept of Representation*. Berkeley: University of California Press. 323 pages.

Pituckmahaket, Orapin, Bencha Yoddumnern-Attig and Uraiwan Kanungsukkasem. 1989. Sampling Procedures in Qualitative Research. Chapter 4 in: Bencha Yoddumnern-Attig, George A. Attig and Wathinee Boonchalaski (eds.). *A Field Manual on Selected Qualitative Research Methods*. Thailand: Mahidol University Institute for Population and Social Research, Publication No. 127. 110 pages

Province of Alberta. 1996. Order in Council pursuant to Section 16 of the *Forests Act* which approves the entry by the Minister of Environmental Protection into a Forest Management Agreement with High Level Forest Products Ltd. Order in Council 623/96. December 19, 1996.

Ray, R. 1998. Aboriginal Issues in Sustainable Forest Management: A Presentation by Ronald Ray to the National Forest Congress April 30, 1998. *NAFA Newsletter*, Spring, 1998. Ottawa: National Aboriginal Forestry Association.

Ross, Rupert. 1992. *Dancing with a Ghost: Exploring Indian Reality*. Markham, Ontario: Reed Books Canada.

Rossman, Gretchen B. and Sharon F. Rallis. 1998. *Learning in the Field. An Introduction to Qualitative Research*. Thousand Oaks, CA: Sage Publications Inc. 271 pages.

Royal Commission on Aboriginal Peoples (RCAP). 1996a. *Looking Forward, Looking Back*. Volume 1 of the Report of the Royal Commission on Aboriginal Peoples. Ottawa: RCAP. 732 pages.

RCAP. 1996b. *Restructuring the Relationship*. Volume 2, Part 2 of the Report of the Royal Commission on Aboriginal Peoples. Ottawa: RCAP. 681 pages.

RCAP. 1996c. *Gathering Strength*. Volume 3 of the Report of the Royal Commission on Aboriginal Peoples. Ottawa: RCAP. 716 pages.

Shaw, Marvin E. 1981. *Group Dynamics: The Psychology of Small Group Behaviour*. New York: McGraw Hill.

Statistics Canada. 2000. Statistical Profile Highlights for Mackenzie No. 23 (Municipal District), Alberta. (CEPS.statcan. ca/english/profil/Det...AME = Mackenzie). August 1, 2000.

Stevenson, Marc G. 1996. Indigenous Knowledge in Environmental Assessment. *Arctic*. 49 (3): 278-291.

Strauss, Anselm and Juliet Corbin. 1990. *Basics of Qualitative Research. Grounded Theory Procedures and Techniques*. Newbury Park, CA: SAGE Publications Inc. 270 pages.

Strong, W.L. and K.R. Leggat 1992. *Ecoregions of Alberta*. Edmonton: Prepared for Alberta Forestry Lands and Wildlife. 59 pages plus map.

Swerdfager, Trevor M. 1992. Cooperative Wildlife Management: A Discussion Paper. Ottawa: prepared for the Canadian Wildlife Service.

Taylor, Estelle. 1998. Native Trees. Court decisions recognize aboriginal title to Canadian forests. *Alternatives*. 24 (3): 4-5.

Taylor, Michael. 1998. Governing Natural Resources. *Society and Natural Resources*. 11 (3): 251-258.

Thompson, Ian D. and Daniel A. Welsh. 1993. Integrated resource management in boreal forest ecosystems—impediments and solutions. *Forestry Chronicle*. 69 (1): 32-38.

Town of High Level. 1997. *High Level*. Supplement to Trade & Commerce Magazine 1997. 12 pages.

Treseder, Leslie and Naomi T. Krogman. 2000a. *The Potential of the Cooperative Natural Resource Management Process in Northern Alberta and Challenges for Implementation*. Final report to the Cooperative Renewable Natural Resource Planning Board. Edmonton: University of Alberta, Departments of Renewable Resources and Rural Economy. 26 pages.

Treseder, Leslie and Naomi T. Krogman. 2000b. *Cooperative Management in the First Nation Traditional Territories: Community Perspectives and Participation*. Final report to the Little Red River Cree Nation and Tallcree First Nation. Edmonton: University of Alberta, Departments of Renewable Resources and Rural Economy. 10 pages.

Treseder, Leslie and Jamie Honda-McNeil. 1999. The evolution and status of wildlife co-management in Canada. Chapter 1 in: Leslie Treseder (ed.). *Northern Eden. Community-based wildlife management in Canada.* Edmonton: Canadian Circumpolar Institute Press, Occasional Publication No. 46.

Treseder, Leslie and Naomi T. Krogman. 1999. Features of First Nation forest management institutions and implications for sustainability. *Forestry Chronicle*. 75 (5): 793-798.

United States Department of Agriculture (USDA). 1998. Disturbance Processes and Ecosystem Management. USDA Forest Service report. 19 pages. (www.fs. fed.us/research/vmpr/disturb.htm). September 14, 1998.

Usher, Peter J. 1993. The Beverly-Kaminuriak caribou management board: an experience in co-management. pp. 111-120 in: J.T. Inglis (ed.). *Traditional Ecological Knowledge: Concepts and Cases.* Ottawa: Canadian Museum of Nature and International Development Research Centre.

Usher, Peter J. 1991. Some implications of the Sparrow judgement for resource conservation and management. *Alternatives*. 18 (2): 20-21.

Usher, Peter J. 1976. Evaluating country food in the northern Native economy. *Arctic*. 29: 105-120.

Wear, D.N. & Hyde, W.F. 1992. Distributive Issues in Forest Policy. pp. 297-314 in: P.N. Nemetz (ed.). *Emerging Issues in Forest Policy*. Vancouver: University of British Columbia Press.

Webb, Jim. 1999. Cooperative Management Within a Framework of Institutionalized Relationships. pp. 197-198 in: D Wall, M.M.R. Freeman, P.A. McCormack, M. Payne, E.E. Wein and R.W. Wein (eds.). *Securing Northern Futures: Developing Research Partnerships*. Edmonton: Canadian Circumpolar Institute Press, Occasional Publication No. 45.

Wellstead, Adam M. 1996. The Role of the Advocacy Coalition Framework in Understanding Forest Policy Changes: Two Case Studies of Alberta and Ontario. M.Sc. Thesis, Department of Forestry, University of Toronto.

Witty, Dave. 1994. The Practice Behind the Theory: Co-management as a Community Development Tool. *Plan Canada*. January, 1994: 22-27.

Wood, P.J. 1996. Sustainable forestry and certification in the Commonwealth. *Forestry Chronicle*. 72 (6): 599- 603.

# APPENDIX A: MEMORANDUM OF UNDERSTANDING BETWEEN THE LITTLE RED RIVER CREE NATION, THE TALLCREE FIRST NATION AND THE GOVERNMENT OF ALBERTA, SEPTEMBER 1, 1999 AND LETTER OF INTENT, COOPERATIVE FOREST MANAGEMENT AND WOOD SUPPLY AGREEMENTS WITH LITTLE RED RIVER CREE NATION AND TALLCREE FIRST NATION, SEPTEMBER 5, 1996

# MEMORANDUM OF UNDERSTANDING

**September 1, 1999**

THIS AGREEMENT IS MADE BETWEEN:

The **LITTLE RED RIVER CREE NATION**, represented by their duly authorized Chief, and Council;

AND

The **TALLCREE FIRST NATION**, represented by their duly authorized Chief, and Council;

(collectively referred to as the "**First Nations**" for the remainder of this Memorandum)

AND

The **GOVERNMENT OF ALBERTA**, represented by the Honourable Minister of Environment and the Honourable Associate Minister of Aboriginal Affairs

(referred to as "**Alberta**" for the remainder of the Memorandum).

PREAMBLE:

**WHEREAS**

A. Alberta remains committed, through the adoption of the *Alberta Forest Legacy* and the Canada Forest Accord (1998), to the concept of sustainable development, adaptive management and the consideration of local views, values and needs in resource management.

B. Alberta and the First Nations concur on the need for development of sustainable ecological management practices so that the human use of the renewable natural resources does not exceed the ecosystem's ability to perpetuate itself;

C. Alberta has developed a Cooperative Management Framework document (November 1996) that promotes consultation and cooperation on renewable resource or environmental matters of mutual interest, and establishes principles on which MOUs are based;

D. The on-going efforts of Alberta and the First Nations to achieve sustainable development and cooperative management within the traditional use areas are identified in the Memorandum of Understanding dated May 26, 1995 as amended pursuant to the execution of Letter of Intent dated September 5, 1996;

E. Alberta and the First Nations support the principle in the National Forest Strategy, 1998 (Strategic Direction 7) which states:

> *To address their legitimate needs and aspirations, Aboriginal communities require greater access to forest resources, and an increased capacity to benefit from forests in their areas of traditional use and Treaty areas, and to contribute to their management.*

F. Alberta and the First Nations wish to engage in a cooperative renewable resource management planning process focused at a landscape level upon the use of renewable natural resources in a responsible manner which will support local and regional, resource based economies;

G. This Memorandum will not operate to abrogate, derogate, or in any way affect Aboriginal rights nor the rights granted to these respective First Nations or any other First Nation pursuant to Treaty 8 or section 35 of the *Constitution Act 1982*; nor shall this Memorandum, or any subsequent agreement signed as a result of it, be construed as limiting or impairing Alberta in the exercise of its legislative and regulatory jurisdiction over matters in relation to natural resources;

H. Alberta and the First Nations acknowledge and agree that this Memorandum is not an allocation process for renewable resources and Crown lands, nor does it create any proprietary interests in renewable resources and Crown lands; and

I. The intention of this document is to confirm existing commitments, state general principles, record the Parties' intentions, and to provide a broad framework for future agreements. This document is not intended to create legally enforceable obligations.

**THEREFORE THE PARTIES AGREE TO THE FOLLOWING:**

## ARTICLE 1: INTERPRETATION

### 1.1 Definitions

For the purpose of this Agreement, each of the following expressions has the meaning ascribed to it in Section 1, unless otherwise specifically provided:

(a) **"Agreement"** means this Memorandum of Understanding dated the 1st day of June, 1999;

(b) **"Cooperative Renewable Natural Resource Management Plan"** means a landscape assessment and a resource management philosophy and goal statement more particularly described in the *Interim Forest Management Planning Manual, April, 1998* published by Alberta Environmental Protection;

(c) **"Cooperative Renewable Natural Resource Management Planning Process"** (or concisely cooperative planning process) means a process to establish one or more forms of collaborative forest management planning which, as outlined in the *Alberta Forest Legacy*, will continue to evolve between the various industrial, commercial and community users of the renewable natural resources;

(d) **"Cooperative Management Planning Board"** means the **Board** established pursuant to the MOU dated May 26, 1995 as amended by the Letter of Intent dated September 5, 1996 and modified and expanded herein;

(e) **"Forest Management Plan"** means the completion of long range and operational timber plans as required through the *Forest Act* and the *Timber Management Regulations*, A.R. 60/73;

(f) **"Renewable Natural Resources"** means all those forest resources including air, land, water, forest, fish and wildlife, parks and natural areas, as contemplated in the concept of sustainable forest management. Renewable natural resources does not include sub-surface, non renewable resources including oil, gas, precious metals, mines or minerals;

(g) **"Resource Management Philosophy and Goal Statement"** means a statement to guide management of renewable natural resources within the Special Management Area for a period of approximately five (5) to ten (10) years in duration. Such a Resource Management Philosophy and Goal Statement is intended to reflect the policy objectives and guidelines found in national and provincial agreements and policies related to the management of renewable natural resources.

(h) **"SFM-NETWORK"** means the Network of Centres of Excellence in Sustainable Forest Management with local offices conducted through the University of Alberta;

(i) **"Special Management Area or SMA"** means that Crown forest land base defined by Forest Management Units F2, F3, F4, F5, F6, F7, and portions of F10 and A9 or, as subsequently modified and agreed to by the Cooperative Management Planning Board; and

(j) **"Technical Planning Committee"** means that committee established through mutual agreement by the regional, resource-based industries with business interests and activities within the SMA.

1.2 **Preamble and Schedules**

The Parties hereby confirm and ratify the matters contained and referred to in the Preamble and all Schedules of Appendices to this agreement and agree that same are expressly incorporated into and form part of this agreement.

## ARTICLE 2: MUTUAL COMMITMENTS

2.1 Alberta and the First Nations commit themselves to the implementation and conduct of a cooperative renewable natural resource management planning process related to management of renewable natural resources within the Special Management Area;

2.2 Alberta and the First Nations commit to take all those actions necessary to support the ongoing conduct of this cooperative renewable natural resource management planning process;

2.3 Alberta and the First Nations agree and commit themselves to fulfil and honour all those outstanding obligations contained in the MOU of May 26, 1995, as amended by the Letter of Intent dated September 5, 1996, and which are not specifically modified by the terms of this agreement. The commitments are enclosed as Appendix 1.

## ARTICLE 3: THE COOPERATIVE MANAGEMENT PLANNING BOARD

3.1 Alberta and the First Nations agree that the Cooperative Management Planning Board (the "Board") established pursuant to the May 26, 1995 Agreement, shall continue as part of the cooperative planning process;

3.2 Membership of the Board

| Members | Eligible Voting Representatives |
|---|---|
| Alberta | 3 |
| Little Red River Cree Nation | 3 |
| Tallcree First Nation | 2 |
| Municipal District of Mackenzie No. 23 | 1 |
| Daishowa-Marubeni International Ltd. | 1 |
| Footner Forest Products Ltd. | 1 |
| Askee Development Corporation | 1 |
| Netaskinan Development Corporation | 1 |

3.3 Alberta and the First Nations agree, in recognition of the emerging interest by industry in the development of oil, gas, precious metals, mines and mineral resources, that the Board, at its discretion, may undertake to solicit and encourage membership by industry stakeholders and by the Alberta Department of Resource Development;

3.4 Alberta and the First Nations agree, in recognition of environmental matters which might arise within the Special Management Area, that the Board, at its discretion, may invite the participation of environmental non-government organizations or special interest groups in the cooperative planning process; and

3.5 Alberta and the First Nations agree that this cooperative planning process must include full opportunity for public consultation and the inclusion of multi-stakeholder input. Accordingly, the Board, in consultation with its participating industrial, First Nation and government organizations, will:

(a) identify and implement a process for stakeholders to interact with the Board;

(b) establish mechanisms for public review and comment; and

(c) consult with, or second experts as necessary to assist the Board.

## ARTICLE 4: BOARD PROCESS AND INTEGRATION

4.1 Alberta and the First Nations agree that, subject to the provisions of Appendix 2, the Board is empowered by this MOU to determine its own practices, procedures and processes evidenced by formal documents including By-laws and operating procedures;

4.2 Notwithstanding section 4.1 above, Alberta and the First Nations agree that the Board shall strive to develop consensus-based practices, procedures, and processes. If the Board is unable to reach consensus on a matter before it, any matter decided by a majority vote of Board members must include a majority vote of First Nation Board members in order to effect a Board agreement;

4.3 Alberta and the First Nations agree that the Technical Planning Committee, established through agreement by the regional resource based industries, shall remain in place, and shall be given a mandate to support and assist the Board to develop and conduct a cooperative planning process. The Technical Planning Committee, as established, is comprised of representatives from the following within the Special Management Area:

Daishowa-Marubeni International Ltd.
Footner Forest Products Ltd.
Askee Development Corporation
Netaskinan Development Corporation, and
Little Red River Cree Environmental Division;

The Technical Planning Committee will develop a terms of reference that will be signed by members of the Technical Planning Committee and will be forwarded to the Board for review and approval.

4.4 Alberta and the First Nations agree, given their respective membership and participation in the SFM-Network, that the Board shall establish a cooperative research and planning relationship with the SFM-Network Caribou-Lower Peace Research Initiative. This cooperative research and planning relationship is viewed by Alberta and the First Nations as responsive to the principle of adaptive management, and the need to establish ecological management practices within the Special Management Area.

## ARTICLE 5: BOARD FINANCE AND FUNDING

5.1 Alberta and the First Nations agree to finance and empower their respective representatives on the Board; and

5.2 Alberta and the First Nations agree to work cooperatively towards identification of funding sources and securing funds to support the cooperative planning process and the associated SFM-Network research within the Special Management Area through sources that may include without limitation:

(a) private sector, corporate forest resource revenues accruing within the Special Management Area;

(b) funds that may be available through the Forest Resource Improvement Association;

(c) funds solicited from the Government of Canada in recognition of their special fiduciary responsibility toward the First Nations.

## ARTICLE 6: APPROVAL PROCESS

Considerations

6.1 The parties to this MOU acknowledge and agree that Ministerial discretion can not be fettered. The Board shall report to the Minister of Environment and the Minister has final decision making authority on matters within provincial jurisdiction.

6.2 Alberta and the First Nations agree that, upon approval of the Resource Management Philosophy and Goal Statement by the Minister, the Board shall have a mandate and responsibility for providing advice and recommendations to the Minister on the following:

(a) development of renewable resource management mechanisms or processes which are required to implement the integrated resource management process;

(b) development of administrative or contractual relationships which are required for implementation;

(c) recommend amendments to regulations, policies or laws which are required for implementation.

6.3 The Board will work collaboratively with local and regional, resource based industries operating within the Special Management Area to ensure that management plans, strategies and practices reflect the goals and objectives established through this cooperative planning process.

## ARTICLE 7: BOARD REPORTING/TERM OF THE AGREEMENT

7.1 The Board will prepare annual reports for the year ending March 31st, which outline its activities and the results that have been achieved. These reports will include an assessment relating to the performance measures and business plans of appropriate Alberta government departments.

7.2 Consistent with Alberta's three-year business planning cycle, this MOU will be in effect until March 31, 2001. At that time, the Parties will undertake a formal evaluation of the progress and results that have been achieved, as the basis for determining renewal of the MOU and any modifications that may be required.

7.3 Any of the parties may terminate this Memorandum by providing at least (30) thirty days written notice to the other parties. The written notice must include a statement regarding the reasons for the termination.

7.4 The Parties agree that this Memorandum of Understanding will become a public document upon execution.

LITTLE RED RIVER CREE NATION

Per: _____
Chief Johnsen Sewepagaham

TALLCREE FIRST NATION

Per: _____
Chief Frank Meneen

**ALBERTA**

Per: _____

**Minister of Environment**

**ALBERTA**

Per: _____

**Associate Minister of Aboriginal Affairs**

## APPENDIX 1

Alberta and the First Nations agree and commit themselves to fulfil and honour all those outstanding obligations contained in the MOU of May 26, 1995, as amended by the Letter of Intent dated September 5, 1996, and which are not specifically modified by the terms of this agreement. Without limitation, these commitments include:

(a) to prepare a Forest Management Plan using the Interim Forest Management Planning Manual for the specific areas contained within the geographic boundaries of Forest Management Units F3, F4 and F6;

(b) prepare a Cooperative Renewable Natural Resource Management Plan for the Special Management Area that will be submitted for review by the Government of Alberta and the First Nations. This plan will consist of:

- a Resource Management Philosophy and Goal Statement; and
- a list of recommendations for integration of this information with ongoing management plans and strategies within the SMA.

(c) ensure that current and future timber management and dispositions are consistent with the spirit and intent expressed in this agreement, as outlined more specifically in the 1995 MOU in the section entitled: "Phase One: Steps to Implementation";

(d) continue negotiations in a timely fashion for the purpose of formalizing First Nation involvement in the forest management of the Special Management Area. Such negotiations will deal with the establishment of Forest Management Agreements, economic opportunities for the First Nations and, traditional use interests within the Special Management Area;

(e) enter into agreements where the Province will allocate an annual harvest to the First Nations concurrent with issuance of DTAs for the Footner Timber Development area, all subject to renewal consistent with coniferous quota renewal requirements; and

(f) enter into agreements under which future allocation of the timber stands in FMUs F3, F4, F6 and A9 will be made to corporations owned by the First Nations and this timber will continue to be available to support regional and local mill operations. Within the context of this agreement;

(i) Commercial Timber Permits or other appropriate tenure will be direct issued to Little Red River Cree Nation for volumes not exceeding the Annual Allowable Cut, within the context of harvesting these stands to meet the objectives of the Forest Management Plan in FMUs F3, F4 and F6.

(ii) Commercial Timber Permits or other appropriate tenure will be direct issued to Tallcree First Nation for volumes not exceeding the Annual Allowable Cut, within the context of harvesting these stands to meet the objectives of the Forest Management Plan in FMU A9.

(iii) a forest inventory will be completed before the timber is committed to a development.

Alberta and the First Nations acknowledge and agree that nothing in this Appendix, nor any subsequent agreement signed as a result of it, be construed as limiting, impairing or otherwise fettering Alberta in the exercise of its legislative authority and regulatory jurisdiction over matters in relation to natural resources.

APPENDIX 2

**Operational Guidelines for the Cooperative Management Planning Board**

1. Alberta and the First Nations agree that the Board has a mandate and responsibility to undertake, and report on the cooperative landscape assessment related to management and use of renewable natural resources within the Special Management Area, including the planning mandate to consider;

   (a) environmental aspects related to eco-system integrity, biodiversity and landscape patterns and structure;

   (b) the presence of endangered, threatened or rare species of flora or fauna within the Special Management Area;

   (c) economic aspects related to resource values, current resource uses, potential future resource uses, development costs and opportunity costs associated with the prescribed resource uses;

   (d) social aspects related to the value of renewable natural resources from a First Nations perspective;

   (e) integration of ecological, economic and social aspects relating to planning and management responsibilities within the Special Management Area.

2. The Board will develop a Resource Management Philosophy and Goal Statement which, if approved by the Minister, is intended to guide the management and use of renewable natural resources within the Special Management Area. Without limitation, the fundamental principles guiding development of the Resource Management Philosophy and Goal Statement shall be sustainable development, ecological management and adaptive management as these principles are defined in the *Alberta Forest Legacy* and the *Interim Forest Management Planning Manual, April 1998*. Within the context of these three principles, the Resource Management Philosophy and Goal Statement shall:

   (a) recommend resource use priorities that are compatible with sustainable development and traditional use of the Special Management Area by the First Nations;

   (b) recommend objectives and guidelines for management and use of renewable natural resource with the Special Management Area;

   (c) identify economic development, employment and training opportunities and initiatives for the First Nations within the Special Management Area;

   (d) identify special initiatives to address First Nations concerns regarding management of wildlife and wildlife habitat within the Special Management Area; and

3. The Board will submit the items outlined in point 2, above, to Alberta and to the First Nations for comprehensive review and comment.

LETTER OF INTENT September 5, 1996

# COOPERATIVE FOREST MANAGEMENT AND WOOD SUPPLY AGREEMENTS WITH LITTLE RED RIVER CREE NATION ('LRRCN') AND TALLCREE FIRST NATION('TCFN')

This letter outlines the mutual intent of the Province of Alberta, LRRCN and TCFN to develop an understanding regarding the co-operative management of forest resources in the Northwest Boreal Region and the allocation of timber resources.

The Province of Alberta and the First Nations' vision is to ensure that forest allocations and practices are sustainable and conducted within an ecological framework. The Parties appreciate the need to recognize traditional values and to create, maintain and enhance economic opportunities at the community level.

It is the intent of the Province of Alberta with the agreement of the LRRCN and TCFN to:

1. The Province of Alberta, LRRCN and TCFN agree to amend the existing Memorandum of Understanding (MOU), dated May 26, 1995, between the Government of Alberta and the Little Red River Cree Nation and the Tallcree First Nation to:

   (a) Expand the "Special Management Area" described in Appendix "B" of the MOU to include Forest Management Units (FMUs) F2, F5, F7, and F10, as determined by the Forest Management Planning Board and approved by the Minister.

   (b) To the greatest extent possible, forest management and planning of the "Area" will be integrated, notwithstanding that the plan will be comprised of two compartments in connection with DMI/High Level and the First Nation's harvest levels.

   (c) Provide an opportunity to expand the Forest Management Board to include representation from Daishowa-Marubeni International Ltd. (High Level Forest Products).

(d) Alberta agrees to commence negotiations in a timely fashion for the purpose of formalizing First Nation involvement in the forest management of the "Special Management Area". Such negotiations will deal with the establishment of forest management agreements, economic opportunities for the First Nations, and traditional First Nation use interests within the "Area".

2. The Province of Alberta and the First Nations will enter into an agreement where the Province will allocate an annual harvest:

(a) Little Red River Cree Nation's allocation is the deciduous timber resource (55 000 $m^3$) from the mixedwood stands and the incidental conifer (43 000 $m^3$) from the operation of the pure deciduous stands in FMUs F3, F4 and F6.

(b) Tallcree First Nation's allocation is the deciduous timber resource of 80 000 $m^3$ of which 50 000 $m^3$ is from the pure stands in FMU F5 and 30 000 $m^3$ from the mixedwood stands in F5 and F7 or such forest management units as may be mutually acceptable.

(c) These allocations will be granted when Alberta issues DTAs for the Footner Timber Development Area (TDA). The timber allocations will be subject to renewal in the year 2006 to be consistent with the coniferous quota renewal requirements.

3. The Province will maintain a deciduous timber reserve for future development of pure stands in FMUs F3, F4 and F6. Forest management guidelines for the reserve include:

(a) Commercial Timber Permits or other appropriate tenure will be direct issued to Little Red River Cree Nation and Tallcree First Nation for volumes not exceeding the Annual Allowable Cut, within the context of harvesting these stands to meet the objectives of the forest management plan in FMUs F3, F4 and F6.

(b) A forest inventory will be completed before the timber is committed to a development.

(c) The Province will negotiate with Little Red River Cree Nation and Tallcree First Nation regarding:

(i) Any formal agreement related to allocation or commitment of this reserve volume prior to execution of such an agreement; and

(ii) The terms and conditions under which allocation of this reserve volume is to be effected should DMI elect to proceed with phase two expansion in the year 2006.

(d) The Province will encourage all parties to enter into good faith negotiations regarding development of a mutually acceptable vehicle for allocation of this reserve volume in support of the proposed DMI phase two expansion.

4. (a) The Province will mandate the local Footner Timber Development Advisory Committee to undertake the following advisory role to the Minister:

(i) To review the draft Request for Proposal document and make recommendations for revision prior to release of the RFP;

(ii) To review applications/proposals received under the RFP and make recommendations regarding selection of the proponent and conditions related to the award; and

(iii) To function in an advisory / consultative role following award to the successful proponent under this RFP.

(b) First Nation representation on the Advisory Committee will be expanded to ensure that Little Red River Cree Nation and Tallcree First Nation each have one representative on the Committee.

(c) It is understood that this letter of intent will be amended, as mutually agreed, to allow for participation of the proponent selected under the Request for Proposals (RFP) in the forest management planning process.

5. This letter of intent will not operate to abrogate, derogate, or in any way affect aborignal rights nor the rights granted to these respective First Nations or any other First Nation pursuant to Treaty 8 or section 35 of the *Constitution Act 1982*, nor shall this letter of intent, or any subsequent agreement signed as a result of it, be constructed as limiting the Government of Alberta in the exercise of its legislative and regulatory jurisdiction over matters in relation to natural resources; and

With the understanding of the above intentions of the Little Red River Cree Nation and Tallcree First Nation are in agreement with the Footner Lake timber development (RFP) proceeding. The signing of this Letter of Intent confirms our mutual understanding.

Chief of the Little Red River Cree Nation

Chief of the Tallcree First Nation

Minister of Environmental Protection

Witness

Minister Without Porfolio
Responsible for Children Services

# APPENDIX B: INTERVIEW GUIDES

## INTERVIEW GUIDES

### Interview Guide for Members of the Caribou-Lower Peace Cooperative Forest Management Planning Board

1. What do you think are the most important benefits of the MOU for your organization?

2. What do you see as the most important benefits for the other participants?

3. What do you see as the Board's immediate priorities?

4. The MOU directs the Board to establish procedures to involve other parties. Do you have any suggestions for ways you would like to see the Board work with each of the following:
   a) for stakeholders to interact with the Board?
   b) For (general) public review and comment?
   c) for consulting with or seconding experts?

5. The MOU allows the Board to invite participation from the oil & gas and mine and mineral industries and the Alberta Department of Energy. How do you think their involvement could help the Board to achieve its objectives?

6. Do you see any challenges for the Board for involving the oil & gas & mining industries and Alberta Energy?

7. The MOU also allows the Board to involve environmental groups. How do you think their involvement could help the Board to achieve its objectives?

8. Do you see any challenges for the Board related to involving environmental groups?

9. How do you think the Technical Planning Committee can assist the Board to develop and conduct a cooperative forest management planning process?

10. What challenges do you see for the Board in developing its Resource Management Philosophy and Goal Statement?

11. Are there any organizations that the Board should be partnering with to achieve its objectives? Do you see any advantages or disadvantages that the Board may have in obtaining resources from other programs to meet its objectives?

12. Does the Board have enough staff and funding support to function effectively? Does your organization have enough staff and funding to support your Board members in their work?

13. Are you satisfied with the way the Board sets its agenda and organizes meetings ? Are there any procedures you would like to see the Board adopt to accommodate (respect) the needs of your organization?

14. Are you able to maintain open communication with other Board members? Do you have any suggestions for improving communication among Board members?

15. Do you think other members of your organization are satisfied with the Board's progress?

16. What mechanisms do you use to get input from other members of your organization?

17. What mechanisms do you use to keep other members informed of Board decisions?

18. Do you think there is adequate awareness of the Board and its role in the First Nation communities? Do you have any opinion on the level of awareness among the other parties to the agreement?

19. Do you think the First Nation communities have meaningful involvement in the Board's decisions?

20. Are you satisfied that the Board is using consensus-based practices, procedures and processes?

21. Has the Board faced any challenges in developing consensus-based practices, procedures and processes?

22. Do you think these processes include appropriate mechanisms for resolving conflict?

23. According to previous MOUs and the Letter of Intent, the Board has three major priority areas. What do you think would be the best ways for the Board to address its overall priorities in the following areas:
    a) Enhancing First Nations use of the forest?
    b) Improving First Nation employment in the forest industry?
    c) Ensuring a sustainable supply of timber for forestry corporations?

**Interview Guide for Government Support Staff**

1. Do you think staff in your department (agency) are well-informed about the Caribou-Lower Peace Cooperative Forest Management Planning Board and its role?

2. What do you see as the benefits of cooperative forest management for your department (agency)?

3. What do you think the Board's immediate priorities should be?

4. Do you think the Board sets its agenda and organizes meetings in a way that is appropriate for your department (agency)? Are there any procedures that the Board needs to observe to accommodate your department's (agency's) participation on the Board?

5. Are there any other groups or organizations that the Board needs to partner with to achieve its objectives? Are there any governmental programs that the Board should be looking at to support its work?

6. Do you think your department (agency) has committed enough staff and funding to support government Board members in their work?

7. Can you think of any other challenges the government Board members might face in doing their work?

8. Can you think of any challenges your department (agency) might face in reaching decisions to take to the Board?

9. Can you think of challenges for your department (agency) in acting on decisions made by the Board?

10. Is there communication between Board members and department (agency) staff? What mechanisms do the government Board members use to obtain input from other staff in your department (agency)?

11. What mechanisms do the government Board members use to keep other agency staff informed of Board decisions?

12. Do you know if other members of your department (agency) are satisfied with the Board's progress?

**Interview Guide for Industry Staff**

1. Do you think staff in your company are well-informed about the Caribou-Lower Peace Cooperative Forest Management Planning Board and its role?

2. What do you see as the benefits of cooperative forest management for your company?

3. What do you think the Board's immediate priorities should be?

4. Do you think the Board sets its agenda and organizes meetings in a way that is appropriate for your company? Are there any procedures that the Board needs to observe to accommodate your company's participation on the Board?

5. Are there any other groups or organizations that the Board needs to partner with to achieve its objectives? Are there any government or industry programs that the Board should be looking at to support its work?

6. Do you think your company has committed enough staff and funding to support government Board members in their work?

7. Can you think of any other challenges the industry Board members might face in doing their work?

8. Can you think of any challenges your company (?or the industry?) might face in reaching decisions to take to the Board?

9. Can you think of challenges for your company (?or the industry?) in acting on decisions made by the Board?

10. Is there communication between Board members and company staff? What mechanisms do the industry Board members use to obtain input from staff?

11. What mechanisms do the industry Board members use to keep staff informed of Board decisions?

12. Do you know if other members of your company are satisfied with the Board's progress?

13. Do you think your company has meaningful involvement in the Board's decisions? Does the Board's decision-making process include appropriate ways of resolving conflict?

14. What do you think would be the best ways for the Board to address its overall priorities in the following areas:
    a) Enhancing First Nations use of the forest?
    b) Improving First Nation employment in the forest industry?
    c) Ensuring a sustainable supply of timber for forestry corporations?

**Interview Guide for First Nation Community Members & Staff**

1. Do you think people in the community (First Nations communities) are well informed about the Cooperative Forest Management Planning Board that is being set up by the First Nations, Government and Industry?

2. What do you see as the benefits of cooperative (shared) forest management for your community (the First Nations communities)?

3. What do you think the Board's immediate priorities should be (most important issues they should be addressing)?

4. Do you think the Board sets its agenda and organizes meetings in a way that is appropriate for the First Nations? Are there any procedures that the Board needs to observe to show respect for the First Nation Board members?

5. Are there any community groups or organizations that the Board needs to partner with to achieve its objectives? Do you know of any government programs that the Board should be looking at to support its work?

6. Do you think the First Nation has enough staff and funding to support its Board members in their work?

7. Can you think of any other challenges First Nation Board members might face in doing their work?

8. Can you think of any challenges for your community (the First Nation communities) in reaching decisions to take to the Board?

9. Can you think of challenges for the community (the First Nations communities) in acting on decisions made by the Board?

10. How do First Nation Board members get input from community members?

11. How do First Nation Board members keep community members informed of Board decisions?

12. Do you know if other members of the community (the First Nations communities) are satisfied with the Board's progress?

13. Do you think your community (the First Nations communities) has (have) meaningful involvement in the Board's decisions? Does the Board's decision-making process include appropriate ways of resolving conflict?

14. According to previous MOUs and Letters of Intent, the Board has three major priority areas What do you think would be the best ways for the Board to address its overall priorities in the following areas:
    a) Enhancing First Nations use of the forest?
    b) Improving First Nation employment in the forest industry?
    c) Ensuring a sustainable supply of timber for forestry corporations?

# APPENDIX C: CONSENT FORM AND INFORMATION SHEET

**TITLE OF PROJECT:** An Assessment of the Effectiveness and Potential of the Caribou-Lower Peace Cooperative Forest Management Board

Research funded by the Sustainable Forest Management Network

**CONSENT:** I acknowledge that the research procedures described on the Information Sheet (attached) have been explained to me and that I have received a copy of these procedures. Any questions I have asked have been answered to my satisfaction and I understand that I may contact the people designated on this form if I have more questions, either now or in the future. I have been assured that personal records relating to this study will be kept confidential and that nothing I say during the interviews will be shared with other participants in this project. I understand that I am free to withdraw from the study at any time. I also understand that the results of the study will be published but that my name will not be used.

The people who may be contacted about the research are:

Leslie Treseder
Phone (780) 492-2111

Naomi Krogman
Phone (780) 492-4178

_____
(Name of Participant)

_____
(Signature of Participant)

_____
(Name of Witness)

_____
(Signature of Witness)

_____
(Date)

_____
(Signature of Investigator)

**INFORMATION SHEET**
**EFFECTIVE PARTNERSHIPS STUDY**

**TITLE OF PROJECT:** An Assessment of the Effectiveness and Potential of the Caribou-Lower Peace Cooperative Forest Management Board

**INVESTIGATORS:**

Ms. Leslie Treseder, Department of Renewable Resources, University of Alberta, General Services Building Room 751, Edmonton, Alberta T6G 2H1
Phone (780) 492-2111

Dr. Naomi Krogman, Department of Rural Economy, University of Alberta, General Services Building Room 515, Edmonton, Alberta T6G 2H1
Phone (780) 492-4178

**DESCRIPTION OF PROJECT:**

The purpose of this study is to evaluate the effectiveness of the Caribou-Lower Peace Cooperative Forest Management Board. We are interviewing people from each of the parties to the Board to ask their opinions about the Board and the cooperative forest management planning process. We are requesting one to two hours of your time to ask your opinions about the Board's structure and processes, and its potential to achieve its goals.

With your permission, we will record the interviews by audio-tape or by taking notes. We will then analyze the responses and identify common themes from the interviews. All interview data will be kept confidential and will not be made available to anyone other than the project investigators. We will use a coding system to keep your identity anonymous. The coding system and any reports from this study will not identify any of the participants by name. We may identify participants by their affiliations (e.g., First Nations, Government, Industry).

Your participation in this study may be of no personal benefit to you, but we hope that your participation will assist the parties to the Board in supporting the Board to achieve its potential. Your participation in this study is voluntary. If you agree to be interviewed, you may choose not to answer any of the questions or stop the interview at any time. If you have any questions about the interview or the study in general, you may contact the investigators at the addresses and telephone numbers listed above.